Feedback concerning Compulsory Rotatory Internship Programme (CRIP) and specialty preference among Medical Interns

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Abstract

Internship in India is a crucial step in the career of a doctor. It comprises of long working hours and stressful environment with huge pressure of impending PG entrance exam which is conducted right after the internship programme.

A descriptive cross sectional study was conducted among 89 interns of a tertiary care teaching hospital with the help of a semistructured proforma and focused group discussions to find out the factors that are help in choosing the specialty preference. Data analysis was done by Epi Info Version 7.

Results show that male interns prefer to pursue post-graduation in the branches of Medicine & Surgery, whilst females preferred Obstetrics & Pediatrics. Factors like personal interest; financially rewarding, job availability and specialty reputation were found to influence the specialty preference. Rural practice was not preferred due to lack of infrastructure, lower income & family problems. PG entrance exam was found to be a major distraction during internship leading to inadequate development of clinical skills.

It is challenging task to review and update the internship programme and PG Entrance Exam but changes must be brought with the highest priority.

Keywords: Speciality preference, Internship, Medical interns, Compulsory rotatory internship programme (CRIP)

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Introduction

MBBS training in India lasts for 4.5 years, followed by a year of compulsory rotatory internship. Internship in India is an important stage in a junior doctor's career. Specialty preferences are tentatively chosen during the undergraduate years and are consolidated during the job training year of internship. Furthermore, it is after the internship that a graduate doctor can appear or attempt for competitive entrance exams for entry into postgraduate residency programs. Student's evaluation of their overall experience in providing or observing patient care during clinical rotations appear to weigh heavily on choosing the field of specialty. Opportunity to have direct patient contact, duration of clinical exposure, interactions with the teaching faculty, quality of these interactions, presence of a physician as a role model or mentor, and the overall atmosphere within departments in healthcare settings, all contribute to the attitude and help build the perception of the interns.^(1,2)

In India, different medical disciplines are affected by shortage to various degrees in last few years.⁽³⁾ The proportion of specialists when compared to the proportion of general practitioners (GPs) has seen a steep increase in the recent years, whereas there was substantial decline in the proportion of general practitioners (GPs).^(4,5)

The choice of career among medical students plays a crucial role in the future of health care system of a country. It also plays an important part in bringing medical specialties into the mainstream focus. There are several factors having strong influence on choice of career specialty among medical students. Some of them are personal interest, occupation of the parents, family background and quality of lifestyle,⁽⁶⁾ personality, type of medical school,⁽⁷⁾ facilities in the medical school, experience during internships, and role-modeling of the tutors. Some other influencing factors include gender,^(1,8-11) specialty prestige,^(8,12) salary,^(8,13) study debt, and academic performances.

It is understood that Compulsory Rotatory Internship Programme (CRIP) helps in grooming the future doctors of this country. However, PG Specialization is regarded as extremely important for success in professional life. Post graduate seats especially clinical specialties have tight competition in PG entrance exams. In India, PG entrance exams are mostly conducted once a year which collide with the end of the internship programme. It is a known fact that PG entrance exam is highly competitive and requires a diligent and totally devoted study of at least 6-10 hours/day for the better part of the year in order to secure a seat in the specialty of choice.

Long working hours and stressful working environment along with the immense pressure of

Total

impending PG entrance exam hinder the affectivity of the Compulsory Rotatory Internship Programme (CRIP). Our study is an attempt to find the views regarding Compulsory Rotatory Internship Programme (CRIP) and the preferred post graduate specialities among interns from NKP Salve Institute of Medical Sciences and Research Center, Nagpur.

Method

A descriptive cross-sectional study was conducted; the questionnaire was well structured and was developed after reviewing the literature extensively. The study was conducted after approval from the Institutional Ethical Committee of NKP Salve Institute of Medical Sciences & Research Center, Nagpur.

Part I: Eighty nine interns who had completed one year rotating internship programme at NKPSIMS & RC were enrolled in the study. Data was collected with the use of pretested semi structured proforma. This was including questions regarding socio-demographic pro le, preference for the specialty, factors responsible for the selection of particular branch and perceptions about working in rural areas. Interns were allowed to choose only one answer in each question. Data was collected and entered into spreadsheet of MS Excel. Later on it was analysed with the use of Epi-Info software.

Part II: Focus group discussion (FGD) was held with these interns in batches of 10. Set of discussion topics were used for the FGDs were skill development, facilities during internship, PG entrance exam, harassment and about internship programme as a whole. Data was collected with the help of other staff members of the Department of Community Medicine, NKPSIMS & RC. Response to open ended questions were collected according to "editing analysis style" given by Miller and Crabtree to identify meaningful segments of the text and grouped into a common theme.^(14,15)

Languages like English, Hindi and Marathi were used during discussion. The response rate was 100%. There was no intervention tried in the study though verbal consent was sought from each and every participant of study.

Result

In present study out of total 89 medical intern 46 (51.7%) were male and 43 (48.3%) were female. Majority of them (47.2%) were belonging to age group of 20 to 23 yrs and most of them were from urban areas. Table 1 shows that most of the parents have Bachelor & Masters degree levels of education and around half of medical students (47.2%) were having one or both of their parents as a doctor by profession. Higher proportions of interns have chosen similar specialty either of father or mother than other specialization. This could be because of early exposure to that subject which may have developed interest or due to ready-made setup.

preferences among interns					
Medical	Male (N=46)	Female	Total		
Specialty		(N=43)	(N=89)		
Medicine	11 (23.91%)	9 (20.93%)	20 (22.47%)		
Pediatrics	2 (4.35%)	9 (20.93%)	11 (12.36%)		
Surgery	11 (23.91%)	0 (0%)	11 (12.36%)		
Obstetrics and Gynecology	0 (0%)	10 (23.26%)	10 (11.24%)		
Radiology	2 (4.35%)	1 (2.32%)	3 (3.37%)		
Ophthalmology	3 (6.52%)	6 (13.95%)	9 (10.11%)		
Orthopedics	6 (13.04%)	0 (0%)	6 (6.74%)		
Anesthesia	0 (0%)	2 (4.65%)	2 (2.25%)		
Dermatology	4 (8.69%)	4 (9.03%)	8 (8.99%)		
Para and non- clinical	5 (10.87%)	2 (4.65%)	7 (7.87%)		
Others	2 (4.35%)	0 (0%)	2 (2.25%)		

 Table 1: Gender wise distribution of Post Graduate

 preferences among interns

Part I: 100% of the interns felt that post-graduation was essential, and majority (97.8%) of them wanted to pursue the same in medical field. Very few of them (2.2%) have shown their desire to pursue specialization in non-medical field such as civil services. None of the interns wanted to practice with just an MBBS degree.

43 (100%)

89 (100%)

46 (100%)

Out of the 87 interns who wanted to pursue higher medical education, a total 80 (91.9%) of interns wanted to pursue a clinical specialty. The four most preferred were surgery and its sub-specialties (34.8%), internal medicine and its sub-specialties (31.5%), pediatrics (12.4%), obstetrics and gynecology (11.2%). Nobody opted for psychiatry and ENT. Only seven interns wanted to specialize in a pre-clinical or para-clinical subject. When asked about the most preferred reason for choosing a medical specialty, personal interest (43.7%), by far was found to be most common factor. Apart from personal interest, some other substantial factors were also found to be responsible like, financially rewarding 20 (23.0%), job availability 11 (12.6%), specialty reputation 6 (6.9%), Stress free/no emergency, parents influence and fixed timing were few other reasons cited to be influential in choosing a clinical speciality. both the interns who opted for civil services gave reputation as the reason behind choosing it. Only 13.5% were willing to work in a rural area, most reasons cited where lack of infrastructure and facilities, lack of health care facilities, lower income and prestige, difficulty in marriage and children's education. If given a chance 24.7% want to travel abroad for higher studies and 31.8% of them want to settle there.

Part II: (Key findings from FGDs)

Communication skills: Majority of interns had acquired high degree of communication skills with patient and junior doctors but communication skill with faculty was either moderate or very low. Most agreed that nurses and other paramedical staffs, junior residents and fellow medical students contributed high or very high in learning process as compared to contribution by faculty members. Most stated low confidence in breaking bad news or communicating with a problem patient or attendant.

Practical skills: The interns felt that they don't get adequate opportunities to gain essential practical skills and are incapable of handling patients alone even after successful completion of internship programme for 1 year. Role played in patient care by them is limited to collection of blood samples for investigations, IV drug administration, discharge summary preparation and other clerical works. Many also stated that it was their fault as they were more focused on PG entrance exam.

Entrance exam: Majority pursue coaching classes during internship period to be able to crack the competitive post graduate entrance examinations. Employment and learning clinical skills is not a priority till they are able to get a PG seat. Most felt that PG entrance exam is a major distraction for them during internship. Most of the interns also felt timing of exam should be during the first year of residency. Many suggested that the pattern of the exam should be changed as well. Many also felt that the evaluation should include clinical skills acquired during the internship rather than focusing on donnish theory.

Others: More than 50% interns graded facilities of accommodation, transportation; learning material and stipend as poor. Some 53.4% considered accommodation provided as poor or very poor. Accommodation for interns, especially during night duties was major concern for them. Similarly lack of learning materials like books in the library, easy access internet and inadequate managerial and administrative guidance were pointed out.

Very few mentioned some degree of physical and mental harassment. Many responded that their expectation after internship was fulfilled moderately or less.

Discussion

In this study, none of the interns plan to pursue a career in general practice with just an MBBS degree. Comparable results were shown in a study done in other parts of India.⁽¹⁶⁻¹⁸⁾ This trend away from general practice is alarming, as primary care can best be provided by general practitioners at the primary care level especially in rural areas rather than super-specialists in an urban setup.^(3,7,18-20) This may be because it is perceived that income and status are lower in general practitioners than specialists. The result differs from several studies performed in North America⁽²¹⁻²⁴⁾, Australia⁽²⁵⁻²⁷⁾ and Europe⁽²⁸⁾ which show that a huge number of students expressing their desire and preferring to pursue a career in general practice.

In this study most interns favoured clinical subjects only about 8% preferred preclinical and para clinical subjects. The comparatively low number of graduates choosing preclinical and paraclinical specialties is a worrisome fact, as it may result in a serious deficit of faculty in these fields in the future. Other studies also show prospective shortage of basic science faculty which is already existing in many areas due to fewer graduate doctors choosing these fields.⁽²⁹⁾

The four most common specialties chosen were medicine, surgery, obstetrics & gynaecology and paediatrics. This is similar to many studies done all over the globe.⁽³⁰⁻³²⁾ A multivariate study conducted among the 1st and 4th year students of University of Michigan Medical School show that 55% of the respondents preferred a surgical specialty or a hospital based practice, however 45% of the respondents opted for a primary care specialty.⁽³³⁾

Gender played a role in choosing specialty in our study, with males opting for medicine and surgery, and females preferring Obstetrics & Gynaecology and Paediatrics. Gender has influenced the preference of specialty in other studies too, with a clear gender predilection for certain specialties. Studies show that females prefer Obstetrics & Gynaecology and Paediatrics.

It was noted that most of the interns feel that the PG Entrance Examination is a major distraction for internship. They give more priority to securing a postgraduate seat than to learning the key clinical skills during internship. This next generation of substandard doctors can be devastating on so many levels. Bringing under-qualified health practitioners into mainstream medicine can have a lot of negative effects to India's already fragile health system.

Conclusion

The factors affecting specialty preference were gender, attitudes about general medicine, attitudes about surgery, expected income, and the influence of other people. With the current scenario, it is very difficult for a developing country like India to have a balanced physician workforce. The undergraduate curricula needs major review and incorporation of community based teaching is the need of the hour. The postgraduate entrance examination would serve its purpose better if it is conducted right after the MBBS final year examination before the internship commences or during or if postgraduate residency was extended to 4 years and first year of the residency would be the compulsory rotating internship. This change in the exam schedule would decrease the chances of distraction during internship and ensure better efficacy of the internship programme.

Critical re-evaluation of will probably show that the CRIP need extensive curriculum changes if the student's careers are to be affected. These findings could have huge implications on health care and education policy makers and play a pivotal role in creating a balanced physician workforce for tomorrow's India.

References

- 1. Saigal P, Takemura Y, Nishiue T, Fetters MD. Factors considered by medical students when formulating their specialty preferences in Japan: findings from a qualitative study. BMC Medical Education. 2007 Sep 11;7(1):1.
- Apker J, Eggly S. Communicating professional identity in medical socialization: Considering the ideological discourse of morning report. Qualitative Health Research. 2004 Mar 1;14(3):411-29.
- Deo MG. Doctor Population ratio for India-The reality. The Indian journal of medical research. 2013 Apr 1;137(4):632.
- Banerjee A, Deaton A, Duflo E. Health, health care, and economic development: Wealth, health, and health services in rural Rajasthan. The American economic review. 2004 May 1;94(2):326.
- Das J, Hammer J. Location, location, location: residence, wealth, and the quality of medical care in Delhi, India. Health Affairs. 2007 May 1;26(3):w338-51.
- Dorsey ER, Jarjoura D, Rutecki GW. Influence of controllable lifestyle on recent trends in specialty choice by US medical students. Jama. 2003 Sep 3;290(9):1173-8.
- Rao KD, Sundararaman T, Bhatnagar A, Gupta G, Kokho P, Jain K. Which doctor for primary health care? Quality of care and non-physician clinicians in India. Social science & medicine. 2013 May 31;84:30-4.
- Khader Y, Al-Zoubi D, Amarin Z, Alkafagei A, Khasawneh M, Burgan S, El Salem K, Omari M. Factors affecting medical students in formulating their specialty preferences in Jordan. BMC medical Education. 2008 May 23;8(1):1.
- Zulkifli A, Rogayah J. Career preferences of male and female medical students in Malaysia. Medical Journal of Malaysia. 1997 Mar;52:76-81.
- Huda N, Yousuf S. Career preference of final year medical students of Ziauddin Medical University. Educ Health (Abingdon). 2006 Nov;19(3):345-53.
- Pawełczyk A, Pawełczyk T, Bielecki J. [Differences in medical specialty choice and in personality factors among female and male medical students]. Polski merkuriusz lekarski: organ Polskiego Towarzystwa Lekarskiego. 2007 Nov;23(137):363-6.
- 12. Scott IM, Matejcek AN, Diet MC, Wright BJ, Brenneis FR. Choosing a career in surgery: factors that influence Canadian medical students' interest in pursuing a surgical career. Canadian Journal of Surgery. 2008 Oct 1;51(5):371.
- Morra DJ, Regehr G, Ginsburg S. Medical students, money, and career selection: Students' perception of financial factors and remuneration in family medicine. Family medicine. 2009 Feb 1;41(2):105.
- 14. Miller WL, Crabtree BF. Primary care research: A multimethod typology and qualitative road map. Doing qualitative research. 1992;3:3-0.
- Malterud K. Qualitative research: standards, challenges, and guidelines. The lancet. 2001 Aug 11;358(9280):483-8.
- Bhat S, D'souza L, Fernandez J. Factors influencing the career choices of medical graduates. J Clin Diagn Res. 2012 Feb;6:61-4.
- Gaikwad V, Sudeepa D, Madhukumar S. A study on career preferences and attitude towards the rural health services among the graduating interns of a medical college in Bangalore rural. Int J Biol Med Res. 2012;3(2):1577-80.
- Gour N, Srivastava D, Adhikari P, Shahi A, Sharma MK, Mahajan PC. Specialty preference among medical students and factors affecting it. Online Journal of Health and Allied Sciences. 2011 Jul 30;10(2).

- Jain A, Future specialization interests among interns of up rural institute of medical sciences and research in saifai, Review of Research. 2013 May;2:8.
- Kumar R. Academic institutionalization of community health services: Way ahead in medical education reforms. Journal of family medicine and primary care. 2012 Jan 1;1(1):10.
- 21. Lepnurm R, Dobson R, Backman A, Keegan D. Factors associated with career satisfaction among general practitioners in Canada. Can J Rural Med. 2007 Sep 22;12(4):217-30.
- 22. Manahan CM, Hardy CL, MacLeod ML. Personal characteristics and experiences of long-term allied health professionals in rural and northern British Columbia. Rural and Remote Health. 2009 Oct 8;9(4):1238.
- 23. Pathman DE, Williams ES, Konrad TR. Rural physician satisfaction: its sources and relationship to retention. The Journal of rural health. 1996 Sep 1;12(5):366-77.
- Stenger J, Cashman SB, Savageau JA. The primary care physician workforce in Massachusetts: implications for the workforce in rural, small town America. The Journal of Rural Health. 2008 Sep 1;24(4):375-83.
- Dowell AC, Hamilton S, McLeod DK. Job satisfaction, psychological morbidity and job stress among New Zealand general practitioners. The New Zealand medical journal. 2000 Jul;113(1113):269-72.
- Harris MF, Proudfoot JG, Jayasinghe UW, Holton CH. Job satisfaction of staff and the team environment in Australian general practice. Medical Journal of Australia. 2007 Jun 4;186(11):570.
- 27. Ulmer B, Harris M. Australian GPs are satisfied with their job: even more so in rural areas. Family Practice. 2002 Jun 1;19(3):300-3.
- Fennig S, Yuval D, Greenstein M, Rabin S, Weingarten M. Job satisfaction among certified and non-certified general practitioners. The Israel Medical Association journal: IMAJ. 2000 Nov;2(11):823-7.
- Ananthakrishnan N. Acute shortage of teachers in medical colleges: Existing problems and possible solutions. National Medical Journal of India. 2007 Jan 1;20(1):25.
- Ohaeri JU, Akinyinka OO, Asuzu MC. The specialty choice of interns at Ibadan general hospitals. West African journal of medicine. 1992 Dec;12(2):78-81.
- Odusanya OO, Nwawolo CC. Career aspirations of house officers in Lagos, Nigeria. Medical education. 2001 May 13;35(5):482-7.
- Eze BI, Okoye OI, Maduka-Okafor FC, Aguwa EN. Factors influencing choice of medical specialty of preresidency medical graduates in southeastern Nigeria. Journal of graduate medical education. 2011 Sep;3(3):367-71.
- Gorenflo DW, Ruffin IV MT, Sheets KJ. A multivariate model for specialty preference by medical students. Journal of Family Practice. 1994 Dec 1;39(6):570-7.