

## SPECIALTY PREFERENCE AMONG THE NEWLY PASSED MEDICAL GRADUATES AND FACTORS AFFECTING IT

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**ABSTRACT:** The objectives of the study were to identify the prevailing trend of specialty related career choices and major factors affecting it amongst the newly passed medical graduates of West Bengal, India. It was a questionnaire based cross sectional study. A total of 600 young doctors participated in the study; out of 600, 301 (50.16%) had opted for surgery and allied branches whereas 273 (45.50%) opted for medicine and allied branches. Only 26 (4.37%) had chosen pre and para clinical subjects as their **desired** area of specialization. According to their choice, their preferred disciplines were Radio diagnosis 106 (17.66%), Orthopedics 95 (15.83%) , Gynae and Obstetrics 88 (14.66%), **Pediatrics 64 (10.66%), General Medicine 59 (9.83%), General Surgery 32 (05.33%) and Ophthalmology 39 (06.50%).**

Amongst the male candidates, subjects selected in order of preference were Orthopedics 95 (28.10%), Radio diagnosis 67 (19.82%), Pediatrics 35 (10.35%), General Medicine 30 (8.87%), General Surgery 23 (06.80%), and Ophthalmology 21 (06.21%). Male doctors had no inclination for pre and Para clinical subjects. Whereas female doctors opted for Gynae and Obstetrics 73 (27.86%), Radiology 39 (14.88%), Pediatrics 29 (11.06%), General Medicine 29 (11.06%) and Ophthalmology 18 (06.87%). Noteworthy 26 (9.92%) female candidates had shown interest for pre and Para clinical subjects.

Among the reasons concerned behind these choices of specialty, major factors were anticipating high earnings 207 (34.58%), passion for the subject 175 (29.17%), better quality of life 125 (20.83%).

The huge disparity between nation's needs and area of interest of the emerging medical graduates is taking the toll in the terms of wastage of human resources and government funds. Counselling programmes for career development is necessary to make each specialty equally lucrative and interesting to the candidates. Necessary changes and rectifications may be required. This should be supported by the necessary government initiative and changing social attitude.

**KEYWORDS :** Specialty Preference

**INTRODUCTION:** Nowadays, almost all medical graduates want to specialize due to competitiveness of medical practice & increasing demand of specialist professionals across the country. Choosing a medical specialty after graduation is a complex decision making procedure involving multiple factors.<sup>1</sup> One of the major factors determining the future course of health services in India depends upon the preferences young doctors of the country have on prevailing specialties of medical profession. An insight into the reasons behind specialty preference and the current trends regarding choice of specialty are important for planning of the health care system of the country.

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Hence we want to identify the current trend of specialty preference among newly passed medical graduates and also to explore the major determining factors behind the choice of various specialties.

**AIM:** The aim of this study is

1. To identify the current trend of specialty preference among newly passed medical graduates.
2. To explore the major determining factors behind the choice of various specialties.

**METHOD:** A cross-sectional, questionnaire based study was done amongst the newly passed medical graduates (Interns and House-staffs) of West Bengal from the year 2011 to 2012 in which they were asked to complete a questionnaire regarding their specialty preferences and the likely reasons behind the same.

The career choices were grouped into 3 broad categories of 'Medicine and allied', 'Surgery and allied' and 'Pre-clinical, para-clinical and hospital administration' for ease of interpretation and better understanding of the prevalent trends.

The students were instructed to mark their subject of choice and were also told to choose the most likely reason behind their choice from the list of choices.

A total of 12 possible reasons were fed to the students in the questionnaire to be marked. Following were the options given to the candidates from which they were supposed to mark the most appropriate selection:

1. Anticipating high income
2. More glamour/ prestige in the subject
3. Passion for the subject
4. Yielding to family pressure
5. Role model in family, society or educational institute
6. Short time for establishment
7. Willingness to take challenges in emergency situation
8. Paucity of that particular specialist in my locality
9. Better quality of life (relatively cool subject, family life unhampered, less work schedule, opportunity to work independently)
10. To be an academician or research scholar
11. Death of any near or dear one who died of a similar disease
12. Others

The final analysis was done after the data collection was completed over a period of 3 years from 600 interns and house-staffs.

**STATISTICAL ANALYSIS:** All statistical analyses were performed using the suitable statistical package for the social sciences, version 16.0 (SPSS, Inc, Chicago, IL). Descriptive data are given as frequencies and percentages.

**RESULTS:** In our study, out of 600 medical graduates, 338 (56.33%) were male & 262 (43.66%) were female. 330 (55%) came from rural & semi-urban areas & rest 270 (45%) were from urban area. The final analysis of the data showed that out of 600 respondents 301 (50.16%) had preferred for surgery

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and allied branches whereas 273 (45.50%) had preferred for medicine and allied branches. 26 (4.33%) had chosen for pre and paraclinical division.

As a specialty, the single most preferred branch was Radiodiagnosis 106 (17.66%). Other major branches were Orthopedics 95 (15.83%), Gynecology & Obstetrics 88 (14.66%), Pediatrics 64 (10.66%), General medicine 59 (9.83%), Ophthalmology 39 (06.50%), General surgery 32 (05.33%) and Dermatology 12 (02.00%). In order of choice, preferred branches in surgical field were Orthopedics 95 (31.56%), Gynecology & Obstetrics 88 (29.23%), Ophthalmology 39 (12.95%) & General surgery 32 (10.63%). As regards to the preferences related to Medicine field, most favorable branches were Radiodiagnosis 106 (38.82%), Pediatrics 64 (23.44%), General medicine 59 (21.61%) & Dermatology 12 (4.39%). In pre & paraclinical division, the doctors had responded in Pathology 6 (23.07%), Pharmacology 5 (19.23%), Community medicine 5 (19.23%), Microbiology 3 (11.53%), Physiology 1 (3.84%), Biochemistry 2 (07.69%), Lab medicine 1 (3.84%), Hospital administration 1 (3.84%), Anatomy 1 (3.84%) & Forensic medicine 0 (0%). It was found that 184 (54.43%) male doctors had preferred surgical branches over medicine and allied branches 154 (45.49%). They had no interest in pre & paraclinical subjects. According to their preference, major subjects were Orthopedics 95 (28.10%), followed by Radiodiagnosis 67 (19.82%), Pediatrics 35 (10.35%), General Medicine 30 (8.87%), General surgery 23 (06.80%), & Ophthalmology 21 (06.21%). 15 (4.43%) male graduates had shown interest in Gynecology & Obstetrics.

On the other hand, female doctors were equally interested in surgical division 117 (44.65%) as well as in medicine related branches 119 (45.41%). 26 (9.92%) respondents had chosen for pre & paraclinical subjects. Their major preferred subjects were Gynecology & Obstetrics 73 (27.86%), Radiodiagnosis 39 (14.88%), Pediatrics 29 (11.06%), General medicine 29 (11.06%), & Ophthalmology 18 (06.87%).

Among the reasons behind choosing the specialty, the leading reason was anticipating high income 207 (34.50%), the other remarkable major factors were "passion for the subject" 175 (29.17%), better quality of life 125 (20.83%), shorter establishment time 20 (3.33%), more glamour in their subject 15 (2.5%), & paucity of particular specialist in their locality 10 (1.66%).

**DISCUSSION:** Numerous factors come into play while opting for a particular specialty. These include individual competency, gender, anticipating high income, liking for the subject, focus on urgent care, intellectual contents of the subject, role model<sup>1,2</sup> like doctor father or doctor teacher, socio-economic background of the physician, type of patients served, scope for doctor patient communication, work related hazards,<sup>3</sup> academic opportunities, career opportunities, scope for surgeries, prestige tag of specialty, family expectations & attitude towards country and society.

Experience gained during internship or housemanship or exposure to a specialty encourages the individual to choose a particular field.<sup>4</sup> Kiker & Zeh<sup>5</sup> concluded that non-economical factors such as planned location of practice, length of residency, type of medical school attended, predictable working hours and prestige of practice may affect physician's choice of specialty. Kao et al <sup>6</sup> found that main factors influencing specialty selection were personal interest followed first by compatibility with personality and second by work load & pressure. Emotional factor like death of a close relative who died of a particular disease may influence the decision of choice.

In India, merit (PG rank) in post graduate (PG) entrance examination is an important determining factor. Moreover, availability of seats of choice with money in private medical colleges

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makes the thing more complicated. Very often, students are compelled to choose a specialty that does not interest them. This may lead to wastage of time & financial resources, improper utilization of human talents, declining enthusiasm & performance. In western countries, for proper utilization of human resources, various programs have been attempted in the form of career development programs, counseling, students mentoring programs, interactive websites & discussion.<sup>7</sup> A Dutch study<sup>8</sup> that analyzed the relation between the subjective knowledge & the specialty preference of medical students found poor correlation & concluded that student's preferences regarding various specialties cannot be trusted & they are all in need of career counseling.<sup>5</sup>

In our study, we have found that doctors of current generation are more interested in clinical subjects than para & pre-clinical subjects. Only female doctors had opted for pre & para clinical subjects. No male candidate had chosen any subject from this group. As a whole, they had shown very poor interest for pre-clinical or basic sciences. None from either sex had expressed their eagerness for Forensic medicine. India is reeling under shortage of man power in pre & para clinical subjects especially in medical colleges. Male doctors mainly had opted for Orthopedics 95(27.81%), Radiodiagnosis 67(19.82%), Pediatrics 35(10.35%), General Medicine 30(08.87%), Ophthalmology 21(06.21%).

Gynecology & Obstetrics subject 73(27.86%) was predominately chosen by females. Other favorite subjects of their choice were Radiodiagnosis 39 (14.88%), Pediatrics 29(11.06%), General medicine 29(11.06%), & Ophthalmology 18(06.87%). We have found some areas of common interest in both groups. These were Radiodiagnosis, Pediatrics, General medicine, Ophthalmology & Dermatology.

Recently, it has been observed that there is a steady decline in number of serving basic doctors in primary health care set up. This is because of increased demand of specialist doctors who get lucrative economic returns while practicing their specialties. But if we think deeply, a country like India needs more of basic medicine practitioners than specialist doctors to tackle the infection & nutrition related diseases leaving a very little scope for specialist doctor's role. The shortage of basic doctors & unequal distribution of specialists are of great concern in the Indian health care system. The relationship between preference & magnitude of shortage of specialist professionals will influence the future allocation of various specialties.

Recently, specialty related life style has drawn increased attention & has become an important factor for selection of career choice. This is related to total hours spent on duty, number of night calls per week, total hours remaining in hand for other activities out of duty hours, independence of medical practice & obviously jobs with minimum tension. The recent significant increase in the number of candidates choosing their career in Radiodiagnosis, Dermatology, Ophthalmology, Pathology & Rehabilitation is related to better quality of life.

So far as reasons behind choosing the specialty is concerned, we have observed that anticipating high income was the most leading factor 207(34.58%) in shaping the career choice. This reflects commercial attitude in their thinking. Same was noticed by Newton et al<sup>9</sup> in their study. The other major variables that influenced the young doctors were passion for the subject 350(29.17%), cool life or better quality of life 125(20.83%). A sizable portion of rural & semi urban based doctors had chosen the specialty thinking of less time needed for establishment.

This is easily explainable as specialty practice in rural areas has little role and is difficult to do so due to technical cause. Other factors like "Willingness to take challenges in emergency situations"

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(5.83%) academic reasons or research activity (0.33%), role models (0.50%), are not in their priority list. Those who are engaged in research work and academic activities are regarded highly in the society. India needs more talents in this area. One thing is admittable that suitable infrastructure for research has not yet developed everywhere. There exists the problem of poor funding both in the government and private sectors. Further there is a serious lack of coordination in administrative segment.

In this study sample size is small & most of the students will change their choice regardless of their initial choice. It is very difficult to elucidate the relation between real needs & preference.

**CONCLUSION:** The young doctor's preferences in our study seem to be driven by high financial returns. Simultaneously, the young doctors have also shown poor interest for pre & para clinical subjects as well as academic and research related works. Their main inclinations have been towards the clinical subjects, especially the ones promising greater financial returns. Also there has been a recent increase in opting of subjects which promise a better quality of life with less busy work schedule even though they do not have huge financial returns. We hope this study will be of great help for our health policy makers.

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