

# Perception of family medicine as the career option among young Indian graduates

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## ABSTRACT

**Aims and Objectives:** 1. To estimate the number of graduates who had exposure to family medicine specialty. 2. To estimate the number of graduates who consider family medicine as the carrier option. 3. To compare the perception of family medicine as career option among the young graduates who had exposure to family medicine during their training or practice with no exposure. **Materials and Methods:** It is a cross-sectional, questionnaire-based study. The doctors graduated 2018 onwards were contacted through SIMSA (South Indian Medical Students Association) and WhatsApp groups (students doing the rural health service and intern WhatsApp). Subjects who consented for the study filled the google form. Filled Google forms were evaluated. **Results:** First choice of among the graduates is general medicine followed by general surgery and paediatrics. Family medicine is 4<sup>th</sup> in the order. There is overall a very positive perception about the family medicine among the respondents irrespective of exposure to family medicine. Majority of them feel that it gives good financial gain (55.55%), interesting (67.03%), work and family balance (75.55%), which contributes to individual and community health (84.07%) and essential part of healthcare system (83.33%). Graduates feel that career growth (26.66%) and academic growth (33.70%) are less and it is not popular (38.88%). If there is an opportunity, majority would choose family medicine (54.44%). **Conclusions:** Around 5.9% are open to choose family medicine as the career option. Medical graduates perceive family medicine subject to give them good work and family balance and the subject is essential part of healthcare system and contributes to the individual and community health, and at the same time, it may not give them great financial gain, academic and career growth.

**Keywords:** Career option, family medicine, Indian medical graduates, perception

## Introduction

Hierarchical healthcare system where patient must mandatorily visit the primary care doctor for all their health needs and are referred to specialist and tertiary centre only if it is not under the preview of the primary care is a proven cost effective and

most efficient healthcare system in the history and this model has been adapted by many countries. Patients are more satisfied and resources are well managed without putting a burden on the tertiary care centre. In the Western countries, the need to strengthen primary care to improve the healthcare system was recognized much early and family medicine has emerged as a separate well recognized and preferred specialty.<sup>[1]</sup>

In India, family medicine was recognized as a medical specialty in 1983.<sup>[2]</sup> As of 2021, only eight medical colleges offer MD in family medicine and 108 hospitals offer DNB family medicine every year,<sup>[3,4]</sup> which is an inadequate number for such a big nation.

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And a Bachelor of Medicine and Bachelor of Surgery (MBBS) graduate registered with the Medical Council of India (MCI) is considered a general practitioner.

The newly formed NMC in India aims to facilitate the delivery of quality primary care as well as promote family medicine as a discipline.<sup>[1]</sup> But till now, the undergraduate medical students have had no exposure to clinical posting of family medicine. And there are no data on interest among the medical students to pursue family medicine specialization. The studies in the past have shown clinical subjects like medicine, paediatrics and surgery and obstetrics and gynaecology as the preferred specialization with gender variation in India.<sup>[5,6]</sup> In this study, we intend to understand how many graduates would consider family medicine as the career option and what are the factors a young graduate considers while choosing a specialty. Does exposure to family medicine concept can change the perception towards family medicine. These data would help the policy makes and the other stakeholder in promoting family medicine as a discipline.

## Objectives

### Primary objective

To estimate the number of graduates who had exposure to family medicine specialty.

To estimate the number of graduates who consider family medicine as the carrier option.

To compare the perception of family medicine as career option among the young graduates who had exposure to family medicine during their training or practice with no exposure.

### Secondary objectives

To study the factors the young graduates, consider, while choosing the specializations.

## Materials and Methods

### Study design

It is a cross-sectional, questionnaire-based study. The doctors graduated 2018 onwards were contacted through SIMSA (South Indian Medical Students Association) and WhatsApp groups (students doing the rural health service and intern WhatsApp). Subjects who consented for the study filled the google form. Filled Google forms were evaluated.

Time duration of collection of data: October 2021 to January 2022.

### Inclusion criteria

MBBS graduated 2018 onwards and age less than 30 years.

### Exclusion criteria

Indian graduates who are already pursuing postgraduation.

## Measurements

The questionnaire included following information

- 1) Demographic profile of students – Name and sex identity were optional.
- 2) Factors influencing the choice of subject among students – Included popularity, interest, academic growth, career growth, work and family balance, financial gain and importance to individual and community healthcare system. A 5-point Likert scale was used for answering the questions.
- 3) Perception of family medicine as the subject of choice among students.
- 4) Open-ended question on their choice of subject

Exposure to family medicine during their graduation and later was recorded – Interaction with the family physician, academic exposure, attending general practice work shop and conferences were considered as exposure to family medicine.

## Sample size

The sample size of 303 was calculated using a prevalence rate of 27% from the previous studies.<sup>[7]</sup> In the study by Ashraf *et al.*, 27% of the students had exposure to family medicine and were aware of the existence of the family medicine option for postgraduate studies. Open Epi online calculation is used to calculate the sample size with a confidence interval of 95%, and a prevalence rate of 27%. The study obtained approval from the IEC of St Johns medical college. Participation was purely voluntary. We could reach sample size of 270 with two reminders for filling up the forms.

## Statistical analysis

The collected data were alphabetically and numerically coded and entered in Microsoft Excel 2007, and statistical analysis was performed in SSPS version 19.0.

Socio-demographic profile and the responses were analysed using descriptive statistics like frequencies, mean and standard deviation. A 5-point Likert scale was reduced to three responses (positive, negative and neutral) for the statistical analysis purpose. *P* value of less than 0.05 was considered statistically significant.

## Results

The questionnaire was shared with 620 young graduates through email and WhatsApp group and 270 (43%) agreed to participate and filled the form.

More than half of the respondent were above 23 years (57.4%) Table 1. 58.51% did not reveal their sex. Majority of respondents lived in urban area (51.48%) and studied in private college (81.85%). Almost all (88.51%) preferred to do specialization and the most preferred training in MD (57.77%). Around 24.44% want to pursue training outside the country. Majority (61.48%) will be practising in urban area in the future.

**Table 1: Socio-demographic profile of students and exposure to family medicine during graduation (MBBS)**

| Variable                           | No exposure to family medicine | Exposure to family medicine | Total number |
|------------------------------------|--------------------------------|-----------------------------|--------------|
| Age                                |                                |                             |              |
| <23                                | 76 (66.09%)                    | 39 (33.91%)                 | 115 (42.59%) |
| >23                                | 64 (41.29%)                    | 91 (58.71%)                 | 155 (57.40%) |
| Sex                                |                                |                             |              |
| F                                  | 36 (53.73%)                    | 31 (46.27%)                 | 67 (24.81%)  |
| M                                  | 30 (66.67%)                    | 15 (33.33%)                 | 45 (16.66%)  |
| Not known                          | 74 (46.84%)                    | 84 (53.16%)                 | 158 (58.51%) |
| Number of years of graduation      |                                |                             |              |
| Intern                             | 113 (57.65%)                   | 83 (42.34%)                 | 196 (72.59%) |
| Practising doctors                 | 27 (36.48%)                    | 47 (63.51%)                 | 74 (27.40%)  |
| Residence                          |                                |                             |              |
| Rural                              | 25 (43.11%)                    | 33 (56.89%)                 | 58 (21.48%)  |
| Semiurban                          | 38 (52.05%)                    | 35 (47.95%)                 | 73 (27.03%)  |
| Urban                              | 77 (55.39%)                    | 62 (44.61%)                 | 139 (51.48%) |
| College type                       |                                |                             |              |
| Government                         | 20 (40.81%)                    | 29 (59.19%)                 | 49 (18.14%)  |
| Private                            | 120 (54.29%)                   | 101 (45.71%)                | 221 (81.85%) |
| Planning for postgraduation        |                                |                             |              |
| Yes                                | 119 (49.79%) 2                 | 120 (50.21%)                | 239 (88.51%) |
| No                                 | 21 (67.74%)                    | 10 (32.26%)                 | 31 (11.48%)  |
| Choice of training                 |                                |                             |              |
| MD                                 | 81 (51.92%)                    | 75 (48.08%)                 | 156 (57.77%) |
| DNB                                | 9 (37.5%)                      | 15 (62.5%)                  | 24 (8.88%)   |
| Foreign degree                     | 34 (51.51%)                    | 32 (48.49%)                 | 66 (24.44%)  |
| Others                             | 16 (66.67%)                    | 8 (33.33%)                  | 24 (8.88%)   |
| Future area of practice            |                                |                             |              |
| Rural                              | 16 (47.05%)                    | 18 (52.95%)                 | 34 (12.59%)  |
| Semiurban                          | 31 (44.28%)                    | 39 (55.72%)                 | 70 (25.92%)  |
| Urban                              | 93 (56.025%)                   | 73 (43.97%)                 | 166 (61.48%) |
| There is MCI recognised FM course  |                                |                             |              |
| Yes                                | 54 (37.5%)                     | 90 (62.5%)                  | 144 (53.33%) |
| No                                 | 86 (68.25%)                    | 40 (31.75%) 1               | 126 (46.66%) |
| Understand what family medicine is |                                |                             |              |
| Yes                                | 69 (39.43%)                    | 106 (60.57%)                | 175 (64.81%) |
| No                                 | 71 (74.74%)                    | 24 (25.26%) 1               | 95 (35.18%)  |
| Total number                       | 140 (51.85%)                   | 130 (48.14%)                | 270          |

**Table 2: Choice of specialization open-ended question**

| Subject                              | Number | Percentage (%) |
|--------------------------------------|--------|----------------|
| Medicine                             | 108    | 40             |
| Surgery                              | 41     | 15.2           |
| Paediatrics                          | 24     | 8.9            |
| Do not want to pursue postgraduation | 21     | 7.8            |
| Family medicine                      | 16     | 5.9            |
| OBG                                  | 16     | 5.9            |
| Dermatology                          | 10     | 3.7            |
| Psychiatry                           | 10     | 3.7            |
| Orthopaedics                         | 9      | 3.3            |
| Emergency medicine                   | 6      | 2.2            |
| Community medicine                   | 5      | 1.7            |
| Anaesthesia                          | 2      | 0.7            |
| Radiology                            | 2      | 0.7            |
| Total                                | 270    |                |

Only 46.66% are aware of the family medicine specialization training and 64.81% understood what family medicine is.

**Table 3: Factors influencing the choice of subject among students**

|   | Number  | Percentage |
|---|---------|------------|
| Give good financial gain                  | Yes 220 | 81.5%      |
| Is popular                                | Yes 148 | 54.8%      |
| Is interesting                            | Yes 265 | 98.1%      |
| Work and family balance                   | Yes 249 | 92.2%      |
| Essential for effective healthcare system | Yes 238 | 88.1%      |
| Individual and community health           | Yes 251 | 93%        |
| Career growth                             | Yes 260 | 96.3%      |
| Academic                                  | Yes 242 | 89.6%      |

Almost half of the respondents (48.14%) were exposed to family medicine. Exposure to family medicine was better in graduates from rural area and also people who studied in government college. Graduates exposed to family medicine had better understanding of family medicine and knew about the MCI recognised postgraduation in family medicine.

**Table 4: Perception of family medicine as subject of choice among students against exposure to family medicine during their graduation**

| Family medicine                                 | Students' perception | No exposure to FM | Exposure to FM | Total        | P value |
|---|----------------------|-------------------|----------------|--------------|---------|
|   |                      | N (%)             | N (%)          |              |         |
| Give good financial gain                        | Agree                | 63 (42%)          | 87 (58%)       | 150 (55.55%) | 0.00    |
| Is popular                                      | Agree                | 37 (35.24%)       | 68 (64.76%)    | 105 (38.88%) | 0.00    |
| Is interesting                                  | Agree                | 81 (44.75%)       | 100 (55.25%)   | 181 (67.03%) | 0.00    |
| Work and family balance                         | Agree                | 99 (48.53%)       | 105 (51.47%)   | 204 (75.55%) | 0.028   |
| Essential for effective healthcare system       | Agree                | 104 (46.22%)      | 121 (53.77%)   | 225 (83.33%) | 0.00    |
| Contribution to Individual and community health | Agree                | 104 (45.81%)      | 123 (54.19%)   | 227 (84.07%) | 0.00    |
| No career growth                                | Agree                | 26 (36.11%)       | 46 (63.89%)    | 72 (26.66%)  | 0.002   |
| Less academic                                   | Agree                | 43 (47.25%)       | 48 (52.75%)    | 91 (33.70%)  | 0.000   |
| Will choose                                     | Yes                  | 86 (58.50%)       | 61 (41.50%)    | 147 (54.44%) | 0.017   |
|   | No                   | 54 (43.90%)       | 69 (56.10%)    | 123 (45.55%) | 0.017   |

First choice of among the graduates is general medicine followed by general surgery and paediatrics. Family medicine is 4<sup>th</sup> in the order Table 2. This shows that young graduates choose broad specialty and are open to family medicine option.

Factors that mattered most while choosing the subject were the interest (98.1%), career growth (96.3%) and family and work balance (92.2%) and also satisfaction of contribution to individual and community health (93%) Table 3. Popularity was the least among all factors.

There is overall a very positive perception about the family medicine among the respondents irrespective of exposure to family medicine Table 4. Majority of them feel that it gives good financial gain (55.55%), interesting (67.03%), work and family balance (75.55%), which contributes to individual and community health (84.07%) and essential part of healthcare system (83.33%). At the same time, they feel that career growth (26.66%) and academic growth (33.70%) is less and it is not popular (38.88%). If there is an opportunity, majority would choose family medicine (54.44%). People who are exposed to family medicine have better positive perception about family medicine. But for the open-ended question on choice of subject for postgraduation, people who had no exposure to family medicine wanted to opt family medicine than people who had exposure.

## Discussion

In this study, we intended to understand the exposure to family medicine and family medicine as a career option among recently qualified medical graduates. Around 48.14% were exposed to family medicine either during training or internship. The exposure was either interaction with the family physicians or attending family medicine CME/Seminar.

### The choice of specialization among Indian medical graduates

The choice of specialization among the young Indian graduates in this study has been similar to the previous studies in India<sup>[8]</sup> except for the surprising and a healthy trend of family medicine

at 4<sup>th</sup> most desired specialization. The first choice among the young graduates is general medicine followed by general surgery and paediatrics. Our study shows that in spite of the low interest, 5.9% of young graduate would want to choose family medicine specialty. Currently, the available number of postgraduation positions in India is very low. This shows the high demand and a need for increase in the number of family medicine postgraduation positions in India.

### The choice of specialization among the medical graduates in other countries

In UK, 27.8% medical graduates choose general practice as their first choice.<sup>[9]</sup> In Canada,<sup>[10]</sup> 30.2% medical students at the preclinical level and 31.4% at the clinical level preferred general practice. And the government goal in Canada is to reach 45%. In Japan, 18.8% of them chose family medicine as a career choice.<sup>[11]</sup> Factors that favoured for family medicine choice among the students in Canada are older age, female gender, preference to serve in rural areas, influence of family, friends and community and the chance to deal with a wide variety of illness and continuity of care.<sup>[12]</sup> In Japan, the factors that favoured to choose family medicine was fulfilling life and an intend to serve rural areas. In many developed nations with effective and well-developed primary care system, general practice is always the first choice among graduates followed by general medicine and other broad specialties.

### The factors that determine the choice and the perception about family medicine

This study shows that the factors which matter the most while choosing the specialization for young graduates are interest in the subject, career growth, work–family balance and job satisfaction of contributing to individuals and community. The graduates perceive family medicine to give good job satisfaction of contributing to individual and community health, good work–family balance and feel it is an essential part of healthcare system, but not a great option for financial gain and subject interest is not high with poor academic and career growth. This can be viewed as a very positive perception about the family medicine as many said they will choose family medicine (54.44%) if given an

opportunity in spite of poor exposure to the family medicine. If we want to see increase take of family medicine in India among the young graduates, we need to address these concerns of making this subject interesting and provide scope for academic and career growth.

The positive perception about the family medicine was better among graduates who had exposure to family medicine concept.

### Way forward for family medicine in India

Its high time that we think of strategies to make family medicine career attractive to the medical students and, at the same time, increase the family medicine postgraduation positions. As highlighted in this study, the family medicine subject needs to be made interesting among the graduates and a career and academic growth for family physicians must be thought about. The actual financial gain as family physician and the professional satisfaction among the family physicians practising in the community needs to be studied.

Evidence on how do we improve interest among the graduates?

The exposure of students to family medicine during undergraduate and during internship can increase the interest among students. Multiple studies support this.<sup>[13,14]</sup>

A systematic review article by Eralda Turkeshi *et al.*<sup>[14]</sup> on the impact of family medicine clerkships in undergraduate medical education found that they are highly valued by students and overall well-accepted and even beneficial to the teaching family physicians and their patients. This review article included 64 reviewed studies reported from a wide range of countries with both well and less-developed academic and clinical family medicine. Students reported satisfaction with content and process of teaching as well as learning in family medicine clerkships. It enhanced previous learning and provided unique learning on dealing with common acute and chronic conditions, health maintenance, disease prevention, communication and problem-solving skills during the clerkship. Students' attitudes towards family medicine improved.

Evidence on academic satisfaction among the family physicians.

Evidence suggest that involving practising family physicians in the community as adjunct faculty in the medical colleges, recognising and upgrading their centres as training sites for students can give a way for the academic and career growth for family physicians.

In the west, academic Family physicians, report enhanced satisfaction as they feel more enthusiastic communicating with the young graduates and satisfied by contributing to the development of students.<sup>[15,16]</sup> They also report learning while interacting with students and their questions provide stimulation to keep up to date with developments of medical knowledge, as

well as encourage reflective practice and have a positive effect on their professional development.<sup>[17,18]</sup> Involvement in teaching students also provided an opportunity to upgrade teaching skills and improved relationship with other staff and team development, as well as their professional status and relationship with patients.<sup>[17,19]</sup>

### Conclusion

1. Around 5.9% are open to choose family medicine as the career option
2. Medical graduates perceive family medicine subject to give them good work and family balance and the subject is essential part of healthcare system and contributes to the individual and community health, and at the same time, it may not give them great financial gain, academic and career growth.
3. The positive perception about the family medicine was better among graduates who had exposure to family medicine concept.

### Recommendation from the study

1. Family medicine could be introduced as one of the core subjects in the undergraduate curriculum to improve the interest towards the subject among the undergraduates.
2. Department of family medicine could be established and made mandatory in all the medical colleges. And practising qualified family physicians may be considered as adjunct faculty.
3. Number of positions in family medicine postgraduation could be drastically increased as the demand is high.
4. Future studies on financial gain and professional satisfaction among the family physicians practising in India is required to understand the facts.

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### Conflicts of interest

There are no conflicts of interest.

### References

1. Paidi G, Beesetty A, Lahmar A, Kop L, Sandhu R. Need of the hour: Family medicine in India. *Cureus* 2022;14:e24596.
2. Kumar R. Family medicine at AIIMS (All India Institute of Medical Sciences) like institutes. *J Family Med Prim Care* 2012;1:81-3.
3. <https://medicine.careers360.com/colleges/list-of-md-in-family-medicine-colleges-in-india>. [Last accessed on 2022 Mar 8].
4. <https://meducate.in/category/dnb-counselling/dnb-seats/>. [Last accessed on 2022 Mar 8]
5. Sengupta B, Das R, Das S. Subject preference for future specialization among undergraduate medical students and their perception towards community medicine as a career

- option: a cross sectional study. *Int J Community Med Public Health* 2019;6:3578-82.
6. Laishram J, Agui RS, Laishram S, Akoijam BS. Subject preference for specialization and factors influencing it among medical graduates of regional institute of medical sciences, Imphal. *J Med Soc* 2019;33:81-5.
  7. Ashraf I, Chan WWT, Prasad R, Kubendra M, Hemavathy D, Prasad S. Family medicine: Perception and attitudes among Indian medical students. *J Family Med Prim Care* 2018;7:205-9.
  8. Subba SH, Binu VS, Kotian MS, Joseph N, Mahamood AB, Dixit N, *et al.* Future specialization interests among medical students in southern India. *Natl Med J India* 2012;25:226-9.
  9. Lambert TW, Smith F, Goldacre MJ. Career specialty choices of UK medical graduates of 2015 compared with earlier cohorts: Questionnaire surveys. *Postgrad Med J* 2018;94:191-7.
  10. Vanasse A, Orzanco MG, Courteau J, Scott S. Attractiveness of family medicine for medical students: Influence of research and debt. *Can Fam Physician* 2011;57:e216-27.
  11. Kawamoto R, Ninomiya D, Kasai Y, Kusunoki T, Ohtsuka N, Kumagi T, *et al.* Factors associated with the choice of general medicine as a career among Japanese medical students. *Med Educ Online* 2016;21:29448.
  12. Gill H, McLeod S, Duerksen K, Szafran O. Factors influencing medical students' choice of family medicine: Effects of rural versus urban background. *Can Fam Physician* 2012;58:e649-57.
  13. Herwig A, Viehmann A, Thielmann A, Gesenhues S, Weltermann B. Relevance of clerkship characteristics in changing students' interest in family medicine: A questionnaire survey. *BMJ Open* 2017;7:e012794.
  14. Turkeshi E, Michels NR, Hendrickx K, Remmen R. Impact of family medicine clerkships in undergraduate medical education: A systematic review. *BMJ Open* 2015;5:e008265.
  15. Sprenger M, Baumgartner J, Moser A, Salzer HJ, Stigler FL, Wendler M. Students' and general practitioners' perceptions of a recently introduced clerkship in general practice. A survey from Austria. *Eur J Gen Pract* 2010;16:148-50.
  16. Mash B, de Villiers M. Community-based training in family medicine--a different paradigm. *Med Educ* 1999;33:725-9.
  17. Pichlhöfer O, Tönies H, Spiegel W, Wilhelm-Mitteräcker A, Maier M. Patient and preceptor attitudes towards teaching medical students in general practice. *BMC Med Educ* 2013;13:83.
  18. Vinson DC, Paden C, Devera-Sales A. Impact of medical student teaching on family physicians' use of time. *J Fam Pract* 1996;42:243-9.
  19. Kollisch DO, Frasier PY, Slatt L, Storaasli M. Community preceptors' views of a required third-year family medicine clerkship. *Arch Fam Med* 1997;6:25-8.