

# Family medicine: Perception and attitudes among Indian medical students

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## ABSTRACT

**Context:** Currently, family medicine is not taught as a part of the undergraduate medical curriculum in India. In this context, the perceptions and attitudes of Indian medical students regarding family medicine as a career choice were studied. **Aims:** This study aims to study the perceptions and attitudes prevalent among Indian medical students regarding family medicine as a career choice and discuss its future implications. **Settings and Design:** Cross-sectional survey study design. **Methods and Material:** We conducted a cross-sectional survey of undergraduate medical (MBBS) students attending the 2016 medical student conference DEMEDCON at Sri Devaraj Urs Medical College in Kolar, Karnataka, India. Besides demographics, the survey included questions pertaining to awareness, exposure, and interest in family medicine in India. We also asked an open-ended question regarding the respondent's perception of the future of family medicine in India. **Statistical Analysis:** Simple statistics such as mean and frequency (%) were calculated. Given the small sample size, no formal tests for statistical significance were performed. **Results:** Responses were collected from 45 students between the ages of 18–24 from 6 medical colleges across Karnataka and Puducherry. The majority (64%) of respondents were in their 3<sup>rd</sup> or 4<sup>th</sup> year of medical college. 98% of respondents expressed a desire to learn more about family medicine as a specialty, and 82% expressed a need to introduce it as a subject in medical college. However, only 58% were aware of the Medical Council of India accredited status of family medicine in India. **Conclusions:** There exists a significant lack of awareness and inadequate exposure among Indian medical students toward family medicine. Nonetheless, there is widespread optimism and a desire to learn more about the subject. Increased awareness and avenues for exposure to family medicine in the formal undergraduate medical curriculum is the need of the hour.

**Keywords:** Family medicine, primary care, undergraduate medical education

## Introduction

The role of well-trained family physicians in providing comprehensive and patient-centric care that results in improving patient outcomes in a cost-effective manner while promoting health equity is widely acknowledged.<sup>[1-3]</sup> However, in India, primary care and family medicine still remain inadequately developed.<sup>[4-7]</sup> In addition, the exposure to, understanding of, and interest in family medicine among

undergraduate medical students are poorly understood.<sup>[8]</sup> This understanding is of great relevance since this student pool forms the medical workforce of the near future, and their perceptions and choices have an impact on changing the landscape of health care. In this context, we explored the knowledge, awareness, and attitudes of medical students toward family medicine.

## Subjects and Methods

We conducted a cross-sectional survey in April 2016, that was administered in the form of a questionnaire to undergraduate

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medical (MBBS) students attending the 2016 medical student conference DEMEDCON at Sri Devaraj Urs Medical College in Kolar, Karnataka, India. Besides demographics, the survey included questions pertaining to: (1) Awareness and exposure to family medicine, (2) Interest in family medicine as a career choice in India or overseas, and (3) Likelihood of choosing family medicine as a specialty. We also included an open-ended question regarding the respondent's perception of the future of family medicine in India.

Questions regarding awareness of and exposure to family medicine looked at the knowledge regarding its accreditation status in India, sources from where respondents received information about family medicine, and opinions on the need to introduce family medicine in the undergraduate medical curriculum and as part of the rotational internship thereafter. The section of the questionnaire on interest in family medicine looked at the future practice location (Urban or Rural India, Overseas), possible specialization being considered by the respondent, reasons for considering family medicine, and potential training paths preferred in pursuing the same. We conducted the study after briefly explaining the nature of the study to the target group. No names or other identifiers were collected thus maintaining confidentiality. We compiled and organized the results in a tabular manner and subjected it to statistical and descriptive analysis.

## Results

Table 1 describes the demographic characteristics of the respondents.

Responses were collected from 45 students across 6 medical colleges. The majority of the respondents were from colleges in Karnataka, and the rest were from the Union Territory of Puducherry. The age of the respondents varied from 18 to 24 years, and about 60 percent were female. Respondents

were from all 4 years of medical school with the majority (64%) being in their 3<sup>rd</sup> or 4<sup>th</sup> year of MBBS.

The responses regarding awareness and exposure to family medicine are summarized in Table 2. The knowledge regarding the current accreditation status of family medicine was average, with 58% of respondents stating that it was Medical Council of India (MCI) accredited. The large majority felt the need to introduce the subject as part of the curriculum (82%) and during internship (96%), while a small group of students (27%) felt that exposure to family medicine in medical school was currently adequate.

Table 3 displays the findings related to interest in family medicine.

Table 4 summarizes questions that looked at respondent opinions on consulting family physicians, role and effect in health systems, and remuneration for family physicians. More than 80% said that they would see a family physician if there was one close to them, believed that family physicians would be able to address their health needs, and that family physicians would improve overall health delivery. The majority were unsure about the income of family physicians.

When presented with a question on the likelihood of choosing family medicine as a specialty, 21% of respondents were likely or highly likely to do so with about 30% considering it an unlikely option in the future, while the majority (49%) were unsure about it.

## Qualitative results

The open-ended question posed to the respondents asked for their views on what the status of family medicine would be in India, 10 years from now. The responses analyzed in a qualitative manner were classified into the following themes:

**Table 1: Demographics (n=45)**

Question	Responses	Frequency (%)
Medical college	SDUMC	22 (49)
Students were from 6 colleges	SMVMC	10 (22)
	JNMC	5 (11)
	Other including no response	8 (18)
Year of medical school****	1 <sup>st</sup> year	3 (7)
	2 <sup>nd</sup> year	13 (29)
	3 <sup>rd</sup> year	22 (50)
	4 <sup>th</sup> year	6 (14)
Gender	Female	27 (60)
Age - range=18-24 years	Mean=20 years, mode=19 years	
Size of community student grew up in (lakh)****	<1	13 (31)
	1-10	16 (38)
	>10	13 (31)
Has a family physician	Yes	26 (61)
Knows where to see family physician	Yes	34 (77)

\*\*\*\*Some of the numbers do not add upto 100% on account of missing data points in survey responses. SDUMC: Sri Devaraj Urs Medical College; SMVMC: Sri Manakula Vinayagar Medical College; JNMC: Jawaharlal Nehru Medical College

**Table 2: Awareness and exposure**

Question	Response	Frequency (%)
Current status of family medicine	MCI accredited	22 (58)
Sources that have helped inform regarding family medicine*	Medical College	19 (43)
	Family and Friends	14 (32)
	Was not aware before survey	7 (16)
	Private Reading	6 (14)
	Promotional Seminar/Material	5 (11)
Exposure to family medicine in medical school	Yes	12 (27)
Feels there is a need to introduce family medicine in the MBBS curriculum	Yes	36 (82)
Feels there is a need for family medicine rotation during internship	Yes	42 (96)

\*Respondents had the option of choosing &gt;1 response

**Table 3: Interest**

Question	Response	Frequency (%)
Upon graduation where do you plan to practice?	Urban	19 (43)
It is noted that several students chose >1 response*	Rural	20 (46)
	Overseas	12 (27)
What specialization are you considering after you graduate medical school?	General surgery	13 (30)
	Undecided	11 (25)
It is noted that several students chose >1 response*	Other - including orthopedics, psychiatry, and neurology	11 (25)
	Internal medicine	8 (18)
	Pediatrics	5 (11)
	Family medicine	2 (5)
	Interest in field	42 (96)
Select one factor from below list that most influences your specialty choice?	Popularity and prestige	1 (2)
	Duration of training	1 (2)
	MD in family medicine	20 (48)
If you were to pursue family medicine, which training option would you chose?	DNB in family medicine	10 (24)
	Just start practicing after MBBS	6 (14)
It is noted several students choose >1 answer*	Seek residency in family medicine overseas	6 (14)
	Other - "start right now, I'd by my family doctor" and "MS"	2 (5)
	Yes	43 (98)
Would like to learn more about family medicine	Yes	43 (98)

\*Respondents had the option of choosing &gt;1 response

**Table 4: Likert scale responses showing opinions toward family medicine practice**

Statement	Strongly disagreed and disagreed (%)	Not sure (%)	Agreed and strongly agreed (%)
I would see a family physician if there was one close to me	4 (9)	4 (9)	36 (82)
I believe family physicians will reduce the cost of care	5 (11)	13 (30)	26 (59)
I believe family physicians will improve overall health delivery	3 (7)	3 (7)	28 (86)
I believe a family physician would be able to address my health needs	1 (2)	4 (9)	39 (89)
Family physicians do not make much money	8 (18)	22 (50)	14 (32)

1. Obvious optimism: Almost half the respondents displayed great positivity regarding the future of family medicine in India. Select participant responses include: "Well up to the mark," "Very helpful as it gives personal care to the patients;" "Vital in delivering health care which is needed most in rural areas," "The concept of a family doctor is sure to find many takers in the future"
2. Cautious optimism: About a third of the participants thought that there existed a possibility for greater awareness and acceptance of family medicine. Select participant responses include "(Family medicine will be) more acceptable and people will know more about it," "Prevalent in most parts of India due to increasing awareness of the subject among students;" "(Family medicine will be) introduced and promoted hopefully"
3. Equivocal: A small group was unsure about the perceived future of family medicine in India. Their responses ranged from "Maybe established" to "Cannot predict it"
4. Pessimism: One respondent felt that the future of family medicine in India looked bleak with the response "Awful" coming to the fore.

## Discussion

This is among the few studies examining the perceptions, attitudes, and level of awareness of undergraduate medical students toward family medicine in India.

Despite a lack of exposure, it was notable that an overwhelming 98% of medical students expressed a desire to learn more about family medicine. 82% students felt that there was a need to introduce family medicine as a subject in medical college. However, only 58% were aware of the MCI accredited status of family medicine in India. This leaves nearly half the student population in the dark about a specialty that has an important role to play in addressing crucial health care issues of equity, continuity of care, cost effectiveness, and holistic care that is patient centric.<sup>[4,9]</sup>

Our study clearly establishes that an accepting and receptive student pool already exists. In fact, when medical students were presented with a question on the likelihood of choosing family medicine as a specialty, 21% of respondents reported being likely or highly likely to do so. Furthermore, the majority of students displayed an optimistic view on the future of family medicine in India, which was evident from the responses to the open-ended question posed to them in the survey. They were hopeful that family medicine would contribute to the improvement of the Indian healthcare scenario. These findings were consistent with similar studies carried out in other countries as well.<sup>[10-13]</sup>

In this context, efforts to increase awareness about family medicine in medical colleges and the undergraduate medical curriculum are of paramount importance. It is imperative that like other subjects, family medicine too should be taught using clinical rotations, lectures/seminars, and workshops.

## Limitations

This study was limited by a small sample size and convenience sampling. However, it is an important step towards gauging the opinions of the future physician workforce of the country. We feel that with periodic surveys of medical students with robust sampling techniques, a clearer picture of the evolving status of family medicine in India will emerge. This in turn would prove useful in identifying points of intervention and designing training modules to incorporate family medicine in the undergraduate medical curriculum.

## Conclusions

Family medicine prepares physicians to work in community settings and meet the health needs of a population.<sup>[3,14,15]</sup> An expanded number of seats for medical students in this field will not only provide a satisfactory career option but will also create a workforce for unmet community health needs.<sup>[7,16,17]</sup> Our study showcases a clear need to expose medical students in India to the specialty of family medicine during their undergraduate medical education.

Towards promoting family medicine at medical colleges, the following recommendations are put forth:

1. The MCI should make the introduction of family medicine in the undergraduate medical curriculum mandatory
2. All medical colleges should establish independent departments of family medicine that are ideally headed by doctors with postgraduation in family medicine
3. On account of family medicine currently being an emerging discipline in India, the MCI should relax rigorous requirements pertaining to years of teaching experience at a medical college for family medicine faculty
4. Further research to understand interests, barriers, and facilitators influencing student choice of family medicine as a career.

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## Conflicts of interest

There are no conflicts of interest.

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