



## AN OBSERVATIONAL STUDY OF CHOICE PREFERENCE FOR POST-GRADUATION AND PERCEPTION TOWARDS COMMUNITY MEDICINE AMONG THE MEDICAL STUDENTS OF SMS MEDICAL COLLEGE, JAIPUR

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### ABSTRACT

**Background:** Management and institutional reforms require proper and adequate attention, which will help us to achieve Universal Health Coverage. And for this, we need motivated public health specialist in adequate number. For that we need to know whether the students of MBBS are actually convinced and motivated to choose community medicine and public health as their career option and pursue higher studies in these branches. **Material and Methods:** A cross sectional survey was carried out among 330 MBBS students (2nd year, 3rd year, Final year and Interns) studying in a tertiary care teaching hospital i.e. SMS Medical College, Jaipur. A pre-tested, semi-structured questionnaire was used, and information was collected on socio-demographic variables, choice of specialty and reasons for opting and not opting Community Medicine. **Observations:** Total 330 MBBS students and interns participated in the study. It was observed that only 11 study participants (3.33%) were willing to take up Community Medicine in Post-Graduation. The most common factors for not opting Community Medicine as a career option among the Medical Students are: 1. Students do not have any idea about the subject (Clueless) (27.51%) 2. Less/No clinical Orientation (18.12%). **Conclusions:** There is limited preference for Community Medicine as a career choice. Curriculum modification and explanation of career path after Post-Graduation in Community Medicine will help to generate interest in the subject.

**KEYWORDS :** Community Medicine, Medical Students, Career Choice, Medical College

### I. INTRODUCTION

Community Medicine focuses on health care systems tailored for population groups. Practitioners in this field assess health determinants to develop comprehensive strategies including promotive, preventive, therapeutic, and rehabilitative measures. They manage and supervise health care services, employing managerial skills effectively in various settings such as hospitals, clinics, or community-based environments.

Upon completing a bachelor's degree in medicine (MBBS), graduates can choose between postgraduate studies, medical officer roles in the public sector, or general practice in the private sector. In India, admission to postgraduate programs largely depends on performance in national and state-level entrance exams, with autonomous and private institutions holding their own exams.[1] Research on medical students' career preferences is limited. However, different studies indicate a strong inclination towards postgraduate studies, with preferences concentrated in fields like Surgery, Internal Medicine, and Obstetrics and Gynecology. Internationally, men often prefer surgery, while women gravitate towards obstetrics and gynecology and internal medicine. [2,3,4]

The success of Vision 2030 for Universal Health Coverage hinges on a well-distributed, skilled, and motivated health workforce. The career choices of medical graduates are pivotal in achieving this, offering insights for manpower planning across various specialties.[5] Effective collaboration between the private and public sectors is essential for ensuring Universal Health Coverage. Despite subpar health care infrastructure, the existing resources are underutilized, partly due to the scarcity of Community Medicine specialists and Public Health experts.

The National Commission on Macroeconomics & Health (2005) highlighted a critical shortage of health professionals, including Community Medicine, due to inadequate faculty, poor quality of training, and neglect of the field. Data from the National Knowledge Commission (2005) showed that out of 3,181 degrees awarded in 2001, only 58 were in Community Medicine, reflecting its low popularity as a postgraduate option. This trend is concerning, as a lack of genuine interest

can compromise the quality of professionals and educators in the field. [6]

Multiple factors influence medical students' career choices, including initial preferences, family expectations, the prestige of certain specialties, lifestyle considerations, job prospects, income potential, educational experiences, and role models. This study, conducted in a Medical College of North India, explores the reasons behind students and intern's attraction or aversion to Community Medicine as a career choice.

### AIM:

Aim is to determine choices of MBBS students and their perception towards Community Medicine as a Career option.

### OBJECTIVES:

1. To determine future specialty choices among medical students
2. To determine reasons for selection and non selection of Community Medicine as Career option

### II. MATERIAL AND METHODS

A Cross-Sectional Observational Study was conducted among the medical students (MBBS) of 2<sup>nd</sup> year, 3<sup>rd</sup> year and final year students and interns of **Sawai Man Singh Medical College**, Jaipur-Rajasthan. 1<sup>st</sup> year MBBS students were excluded from this study because they do not have exposure of Para-Clinical and Clinical subjects.

The study was conducted over a period of two months (February 2024 to March 2024) after obtaining approval from Ethics committee. (Ethical approval Ref. No. 572MC/EC/2024). Verbal consent was taken from the medical students and interns and a pre-designed, pre-tested questionnaire was handed out to them via Google Form. They were asked to fill it up by themselves. The study participants were ensured of confidentiality of their personal information and choices made by them.

### Sample Size-

Sample size is calculated at 95% C.I, alpha error of 0.05 and expecting 7.28% study participants willing to take Community Medicine in Post-Graduation as per the Reference article.[7] At 3% absolute allowable error the required sample size will

be 300 participants. Considering 10% Non responders in the study, therefore 330 participants were enrolled in the present study.

There were total 330 students and interns available at the time of study, and all 330 returned the filled up questionnaires. The questionnaire mainly contained personal information of the students, Reasons for not opting Community Medicine as career option, reasons for opting the subject (who were willing to take up Community Medicine in Post-Graduation) and they were also asked about feedback as to how to make Community Medicine interesting as career option.

After filling up the questionnaire, collected data was tabulated in Microsoft excel sheet and analysis was done and showed it in Tables, Proportions and charts.

**III. RESULTS**

Total 330 MBBS students and interns participated in this study. There were 84 students from 2<sup>nd</sup> year, 184 students from 3<sup>rd</sup> year, 26 from final year and 36 interns.

It was observed that only 11 study participants (3.33%) were willing to take Community Medicine in Post-Graduation

(Table 1). Out of 11 students who opted Community Medicine, 10 were Males and Only 1 was Female. (Chart 1)

It was observed that Internal Medicine was taken from most of the students i.e. 103 out of 330 (31.20%), followed by Surgery, Dermatology and Radio-Diagnosis.

It was also observed that Anaesthesiology, Ophthalmology and Psychiatry were taken by 2, 3 and 4 Students respectively. Pre and Para Clinical Subjects were taken by None of them.

For the reason of selecting Community Medicine as Career Branch, Out of 11 students who opted Community Medicine, 5 students gave the reason that it helps us to understand people and Community better; followed by It improves population health by 4; Research oriented by 1 and it has wider scope by 1 student. (Chart 2)

Chart 3 Shows the reasons for not opting the Community Medicine as their Post-Graduation Branch. The most common factors for not opting Community Medicine as a career option among the Medical Students are: 1. Students do not have any idea about the subject (Clueless) (27.51%) 2. Less/No clinical Orientation (18.12%).

**Table 1 Semester wise choice of specialties of the students**

Characteristics	2nd Year		3rd year (Final MBBS - part 1)		4th year (Final MBBS - part 2)		Internship		Total Count of Studying in -	
	No.	%	No.	%	No.	%	No.	%	No.	%
Anesthesiology	1	1.20%	1	0.50%		0.00%		0.00%	2	0.60%
Community Medicine (PSM)	1	1.20%	7	3.80%	1	3.80%	2	5.60%	11	3.30%
Dermatology	11	13.10%	25	13.60%	3	11.50%	4	11.10%	43	13.00%
ENT		0.00%	5	2.70%		0.00%	1	2.80%	6	1.80%
Forensic Medicine	3	3.60%	1	0.50%		0.00%		0.00%	4	1.20%
Internal Medicine	16	19.00%	68	37.00%	8	30.80%	11	30.60%	103	31.20%
Obstetrics and Gynecology	1	1.20%	10	5.40%	2	7.70%		0.00%	13	3.90%
Ophthalmology	2	2.40%	1	0.50%		0.00%		0.00%	3	0.90%
Orthopedics	6	7.10%	5	2.70%		0.00%	1	2.80%	12	3.60%
Paediatrics	5	6.00%	12	6.50%	4	15.40%	2	5.60%	23	7.00%
Psychiatry		0.00%	1	0.50%	2	7.70%	1	2.80%	4	1.20%
Radiodiagnosis	11	13.10%	18	9.80%	2	7.70%	5	13.90%	36	10.90%
Surgery	27	32.10%	30	16.30%	4	15.40%	9	25.00%	70	21.20%
Grand Total	84	100%	184	100%	26	100%	36	100.00%	330	100%

**Table 2 Socio-Demographic Characteristics of the students**

Characteristic	2nd year (n=84)		3rd year (Final MBBS - Part 1) (n=184)		4th year (Final MBBS - Part 2) (n=26)		Interns (n=36)		Total (n=330)
	No.	%	No.	%	No.	%	No.	%	
<b>Gender</b>									
Female	27	32.14	75	40.76	18	69.23	10	27.8	130
Male	57	67.86	109	59.24	8	30.77	26	72.2	200
<b>Area of Residence of Parents</b>									
Rural	38	45.24	86	46.74	8	30.77	21	58.3	153
Urban	46	54.76	98	53.26	18	69.23	15	41.7	177
<b>Occupation of the Father</b>									
Associate professionals	12	14.29	23	12.50	3	11.54	2	5.6	40
Professionals	44	52.38	98	53.26	15	57.69	19	52.8	176
Semi-skilled	20	23.81	48	26.09	7	26.92	11	30.6	86
Unskilled	8	9.52	15	8.15	1	3.85	4	11.1	28
<b>Presence of Doctor in family</b>									
No	62	73.81	148	80.43	17	65.38	25	69.4	252
Yes	22	26.19	36	19.57	9	34.62	11	30.6	78

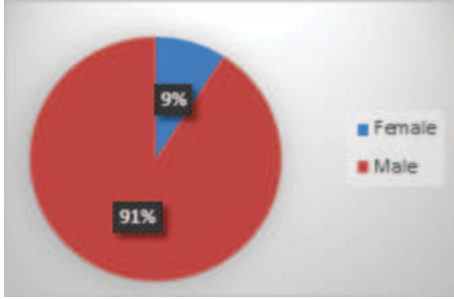


Chart 1 Gender proportion of those who opted Community Medicine

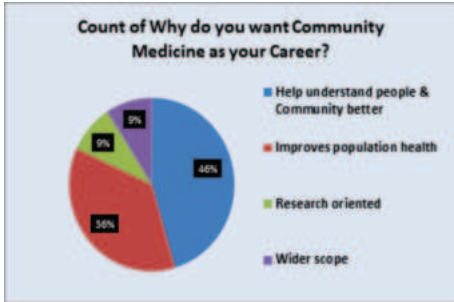


Chart 2

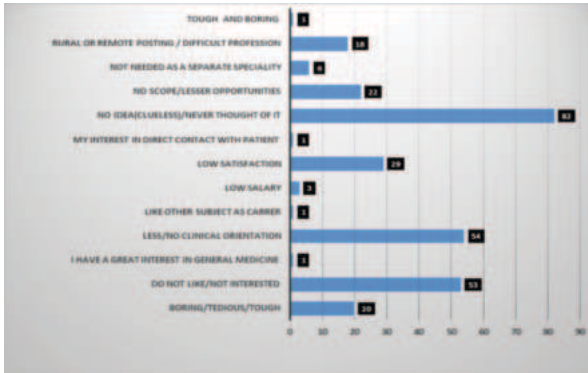


Chart 3: Count of Reason for not opting Community Medicine as Career

**IV. DISCUSSION**

We devised a qualitative method within a conceptual framework to analyze the career preferences of MBBS students and interns, recognizing their potential impact on the national healthcare workforce. The distribution of doctors across specialties plays a crucial role in ensuring equitable healthcare provision. Research by Roy et al.[8] revealed a male-dominated preference (80%) for Social Medicine/Public Health among medical students and same dominance is seen in our study too.

However, a Dutch study by Soethout MB[9], indicated a higher inclination among women towards youth health care, a specialty akin to Community Medicine. In another study by Maiti et al.[7], only a small fraction of students (6 out of 398) opted for Community Medicine for postgraduate studies, while in a study by Sitanshu Sekhar Kar et al.[1], only 10 students (Out of 204) chose Community Medicine and ENT as their postgraduate branches (though separate data for Community Medicine wasn't provided).

While we didn't delve into the specific reasons behind specialty choices, several potential factors likely influence these decisions, such as personal interests, experiences during academic and clinical rotations, guidance from seniors, familial expectations, job prospects, and financial considerations. Given India's status as a developing nation,

financial incentives likely weigh heavily in career decisions, explaining the prevalence of specialties perceived to offer greater financial stability.

**V. CONCLUSION**

Delving into the intricacies of Community Medicine, we uncover its profound interconnections with various disciplines, including Pediatrics (encompassing early neonatal care, infant development, immunization, childhood nutrition, and ailments), Obstetrics & Gynecology (covering antenatal care, maternal well-being and nutrition, safe pregnancy, and maternal survival), General Medicine (involving risk factor identification and treatment of both Communicable and Non-Communicable Diseases), and Public Health (encompassing health system management, strengthening, research, national health program operations, and policy formulation).[10] Consequently, a Community Medicine specialist assumes multiple roles — as an epidemiologist, health manager, advocate, communicator, and family physician. These specialists are often lauded as "Five Star Doctors" owing to their comprehensive expertise in public health.

Embarking on a career in Public Health as a Community Medicine specialist can be profoundly fulfilling. Numerous Public Health professionals actively contribute to national and international organizations such as WHO, UNICEF, CARE, UNFPA, NIHFW, NICD, MOHFW, and ICMR, among others. International opportunities present tax-free substantial salaries, generous perks, flexible work hours, global travel prospects, and avenues for professional growth. Institutions like the Public Health Foundation of India (PHFI) are spearheading the establishment of a network of Indian Institutes of Public Health across the country, offering competitive salaries to faculty members and sponsoring young professionals for training in prestigious global public health institutes, nurturing them as future leaders in the field.[11]

It is paramount to enlighten MBBS students about these facts, schemes, and prospects. Educational institutions, healthcare facilities, and governments should collaborate to cultivate interest among students in pursuing Community Medicine as a career option. However, it is worth noting that while many state governments sponsor Medical Officers for advanced degrees like MD (PSM/CM), Diploma in Public Health (DPH), Diploma in Maternal and Child Health (DMCH), Masters in Public Health (MPH), and Master of Applied Epidemiology (MAE), there often exists a dearth of structured placement opportunities after Post-Graduation. This discrepancy leads to frustration among Public Health specialists who find themselves in general medical roles after acquiring specialized training.

Governments should delineate clear policies regarding career progression for Public Health specialists. Teachers and peers in the field of Community Medicine must play an active role in shaping the MBBS curriculum to entice students, clearly articulate course objectives, provide robust teaching and learning experiences, and implement fair assessment processes. Addressing concerns about recognition, societal status, job satisfaction, and lack of information about career prospects is paramount to dispel misconceptions and promote Community Medicine as a rewarding and impactful career path. Leveraging the appeal of social service can also be a compelling strategy to attract students with a passion for making a difference in society to the field of Community Medicine.[7]

**Limitation of the study:**

1. The scope of this study was limited to a single medical college in North India due to constraints in manpower and

financial resources. Conducting a multicentric study across a broader geographical area would yield more reliable results, providing a more representative view of students across the state or country.

2. Changes in preferences over the course of MBBS were not considered in this study, as this aspect could be more accurately assessed through a prospective study.

3. The proportion of study participants across different study years is not equal, which may impact the generalizability of the findings.

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#### REFERENCES

- [1]. Kar, S. S., Ramalingam, A., Premarajan, K. C., & Roy, G. (2014). Do medical students prefer a career in community medicine?. *International journal of preventive medicine*, 5(11), 1468.
- [2]. Lal, P., Malhotra, C., Nath, A., Malhotra, R., & Ingle, G. K. (2007). Career aspirations and apprehensions regarding medical education among first year medical students in Delhi. *Indian journal of community medicine*, 32(3), 217-218.
- [3]. Kumar, R., & Dhaliwal, U. (2011). Career choices of undergraduate medical students. *The National medical journal of India*, 24(3), 166-169.
- [4]. Subba, S. H., Binu, V. S., Kotian, M. S., Joseph, N., Mahamood, A. B., Dixit, N., ... & Reddy, P. (2012). Future specialization interests among medical students in southern India. *National Medical Journal of India*, 25(4), 226-9.
- [5]. Geneva: World Health Organisation; 2008. [Last cited on 2013 Aug 02]. The World Health Report 2008: Primary Health Care - Now More than Ever. Available from: [http://www.who.int/whr/2008/08\\_overview\\_en.pdf](http://www.who.int/whr/2008/08_overview_en.pdf).
- [6]. World Health Organization. Not Enough Here Too Many There - Health Workforce in India. New Delhi, India; 2007.
- [7]. Maiti, A., Maiti, A., Mohanty, S. S., Sarangi, L., & Pattnaik, A. (2019). Community medicine as a career option: Perception among the Medical Students in a Medical College of Bhubaneswar, Odisha. *IOSR JDMS*, 18(4), 15-20.
- [8]. Roy, B., Banerjee, I., Sathian, B., Mondal, M., Kumar, S. S., & Saha, C. G. (2010). Attitude of Basic Science Medical Students towards Post Graduation in Medicine and Surgery: A Questionnaire based Cross-sectional Study from Western Region of Nepal. *Nepal Journal of Epidemiology*, 1(4), 126-34.
- [9]. Soethout, M. B., Ten Cate, O. J., & van der Wal, G. (2008). Development of an interest in a career in public health during medical school. *Public health*, 122(4), 361-366.
- [10]. Boelen C. The five-star doctor: An asset to health care reform? Geneva. World Health Organization 1993; [http://www.who.int/hrh/en/HRDJ\\_1\\_1\\_02.pdf](http://www.who.int/hrh/en/HRDJ_1_1_02.pdf)
- [11]. Public Health foundation of India. <https://www.phfi.org/>.