

Community Medicine as a Career Option: Perception among the Medical Students in a Medical College of Bhubaneswar, Odisha.

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Abstract: Background: A very important barrier to achieve universal health coverage is the fact that proper and adequate attention is not being given to management and institutional reforms. To overcome this hurdle, motivated public health specialists are needed in adequate numbers. 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.

This study was carried out to find out the reasons for medical students for opting or shying out community medicine as their career option and making the students aware of the career opportunities.

Objectives:

1. To determine the causes to opt/reject community medicine as a career option among the study population.
2. To make the medical students aware about the opportunities in community medicine and public health.

Materials and Method:

Type of study: Cross-sectional study. Study area: Hi-tech Medical College & Hospital, Bhubaneswar, Odisha. Study participants: MBBS students and interns at HMCH, Bhubaneswar. Study population: 398 medical students (second, fourth, sixth, eighth semester and interns). Study period: 3 months (March 2015 to May 2015). Data collection: By self-administered pre-designed semi-structured questionnaire. Statistical analysis: The data were compiled in Microsoft excel sheet and statistical analysis was done with the help of SPSS software. Relevant statistical tests were applied.

Results:

Total 398 MBBS students and interns participated in the study. It was observed that only 29 study participants (7.28%) were willing to take up community medicine in post-graduation. Lack of career guidance is one of the major contributors of rejection of community medicine as career option by the students. "Name/fame compared to other clinical subjects", "Less opportunity of direct treatment of patients", "Interference with person of other sphere of life", "Unhealthy personal life" are other contributors to the rejection process.

Keywords: Community medicine, MBBS Students, Career choice, Medical College.

Date of Submission: 04-04-2019

Date of acceptance: 19-04-2019

I. Introduction

Community Medicine is basically a system of care based on population groups. The specialists in Community Medicine identify the determinants of health and take them into account while planning promotive, preventive, therapeutic and rehabilitative measures/strategies. Organization and supervision of the assigned health care services with adequate managerial skills in the hospital, clinic or field situation is conducted by them.

After completion of a bachelor's degree (MBBS), the career options available for medical graduates are either pursuing post-graduation or doing medical officer-ship in the government sector and general practice in the private sector. In India, the postgraduate seats are allotted based on the scores in a national level entrance test and state level entrance tests for most government colleges. Autonomous and private institutions conduct their own national level entrance tests.[1]

Few studies have been accessed to know the preferred career options of medical students. Studies from Delhi and Manipal showed that 83.5% and 99.2% students wanted to pursue post-graduation respectively. The choice of specialty was limited to a few subjects such as Surgery, Internal Medicine and Obstetrics and Gynecology. Globally, the choice of subject seems to be surgery for men and obstetrics and gynecology and internal medicine for women.[2,3,4]

The Vision 2022 for universal health coverage is crucially dependent on the provision of numerically adequate, equitably distributed, appropriately skilled and motivated health workforce to accomplish accessible and equitable health care provision. Human resources are the most important component in any system.[5]

Preferred career option of medical graduates plays an important role in determining the success of universal health coverage in India. Their interest provide vital information regarding manpower forecasting in each of the medical specialty and super-specialty subjects. Better management would allow for effective co-ordination between private sector and government or public sector to ensure universal health coverage.[6]

It is a known fact that the infrastructure of the health care delivery system in our country is not up to the mark till now, but whatever is available, that is not utilized properly because of lack of Community Medicine specialists and Public health experts.

National Commission on Macroeconomics & Health -2005 identified acute shortage of human resources for health of all categories, including lack of good teaching faculty, low quality of instruction and skill acquisition and neglect of Community medicine.[6]

As per National Knowledge Commission-2005, in the year 2001, out of 3181degrees awarded, only 58 were in Community medicine, which reflects the low preference of Community medicine as a choice for pursuing post-graduation. Even if the students opt for Community medicine, they do not do so out of interest, but just to have a Post-Graduate degree. This trend is even more dangerous, as any branch if pursued without interest will never produce quality doctors and academicians.[7]

There are diverse factors that influence the choice of subject in eventual career among the medical students. Career preference at the time of admission to the medical course is thought to play an important role. In Indian set up the family play a vital role in deciding the career choice of the children, the parents have high expectation from their children. When a student goes to medical college, the prior idea of his parents of their child being a clinician having a clinic curing patients in a clinical or hospital set forces him to try for clinical subjects in higher studies most of the times. It is even observed that if a student does not get a higher rank in entrance examination to get a clinical subject, his self –esteem also gets lowered and his family becomes unhappy. Other factors that have been suggested to play a role include the characteristics of the medical college, lifestyle preferences, prestige, job opportunities, expected income, longitudinal care, preclinical and clinical experiences, and role models.[8]

The present study was conducted in a medical college of eastern India to find out the possible reasons among medical students and interns for opting for or shying away from Community medicine as a career option and to look for the possible determinants behind their decision.

II. Materials & Methods

A cross-sectional study was carried out among the medical students (MBBS) of II (1st year) ,IV(2nd year),VI (Final year Part 1),VIII semester (Final year part 2) students and interns of Hi-Tech Medical College & Hospital, Bhubaneswar, Odisha. The study was conducted over a period of three months (March2015 to May2015). Verbal consent was taken from the medical students and interns and a self-administered, pre-designed, pre-tested questionnaire was handed out to them. 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. There were total 472 students and interns available in the institution out of which 401 returned the filled up questionnaires. Amongst them 3 students did not want to pursue higher studies. So we included the rest 398 students who wished to do post-graduation as ‘study participants’. The questionnaire mainly contained personal information of the students, Reasons for not opting Community Medicine as career option (participants were asked to rank the possible reasons mentioned in a 5-point Likert scale), reasons for opting the subject (who were willing to take up Community Medicine in PG) and they were also asked about feedback as to how to make Community Medicine interesting as career option. After filling up the questionnaire, the participants were asked to return that to the investigator. Data collected were tabulated in Microsoft excel sheet and analysis was done by using SPSS software with the help of various statistical tests. Bar diagram, Proportions, Chi-square test were used to represent the results. P value less than 0.05 was considered to be significant.

III. Results

Of the 472 available students, 401 (84.96%) students returned the completely filled questionnaires. Almost all the students wanted to pursue post graduation (398; 99.3%). We included the students who wanted to pursue post graduation (398) in our study. Of the selected study population, 203 (51%) were girls. There were 96 students from 2nd semester, 84 from 4th semester, 81 from 6th semester, 76 from 8th semester and 61 numbers of students were doing their one year compulsory rotating internship. Distribution of boys and girls across the semesters are shown in bar chart (Figure 1).

Figure 1: Gender distribution of the participants (Semester wise) :

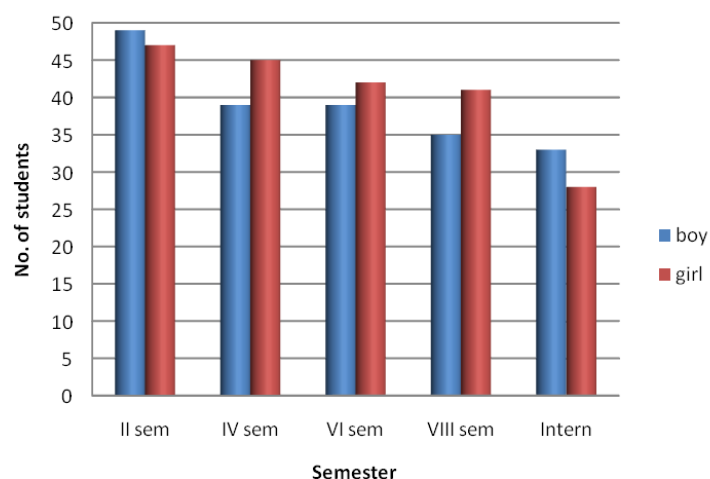


Table 1: Socio-Demographic Characteristics of the students:

Characteristics	II Semester		IV Semester		VI Semester		VIII Semester		Intern	
	No.	%	No.	%	No.	%	No.	%	No.	%
Area of Residence										
Urban	82	85.42	67	79.76	64	79.01	58	76.32	47	77.05
Rural	14	14.58	17	20.24	17	20.99	18	23.68	14	22.95
Occupation of Father										
Semi-skilled & Skilled	23	23.96	31	36.90	23	28.40	29	38.16	15	24.59
Clerk, farm, business	37	38.54	19	22.62	15	18.52	27	35.53	23	37.70
Professionals	36	37.50	34	40.48	43	53.09	20	26.32	23	37.70
Presence of Doctor in Family										
No	78	81.25	74	88.10	71	87.65	63	82.89	51	83.61
Yes	18	18.75	10	11.90	10	12.35	13	17.11	10	16.39

Table 1 shows the socio-demographic characteristics of the participants. Most of the students (79.9%) came from families residing in urban area [Minimum of 76.32% in VIII semester students and maximum of 85.42% students in II semester]. Occupation of fathers varied from semi-skilled, skilled workers, clerks, having farm and businessmen to professionals. Only 15.33% students gave a history of having a family member or close relative as a doctor.

Second-semester students did express a choice of specialization, which we presume was made before joining the medical course. However, they had not been exposed to the entire spectrum of specialties in the medical curriculum and thus had a narrower range of choices. 44.79% students were having Medicine as their first subject of choice for post graduation. Choice of subjects was limited to few subjects as shown in table 2. Almost none of the students was interested in pre and para-clinical subject across all semesters. The widest range of choices was seen among sixth, eighth-semester students and interns. Career preferences change dynamically as the students' progress through the course, gaining exposure to different specialties. It was observed that only six students preferred to take community medicine as future career as first choice. Only 29 students (7.28%) were willing to keep community medicine amongst their top three preferred subjects. Presence of doctor in family has a significant influence on students to opt for community medicine in post graduation. (P= 0.0147, Table 5)

Table 2 - Semester wise first choice of specialties of the students:

Characteristics	II Semester		IV Semester		VI Semester		VIII Semester		Intern	
	No.	%	No.	%	No.	%	No.	%	No.	%
Medicine	43	44.79	32	38.10	27	33.33	15	19.74	12	19.67
Surgery	13	13.54	15	17.86	14	17.28	11	14.47	9	14.75
Obstetrics & Gynaecology	16	16.67	11	13.10	11	13.58	15	19.74	11	18.03
Pediatrics	11	11.46	11	13.10	9	11.11	9	11.84	7	11.48
Orthopedics	8	8.33	5	5.95	7	8.64	9	11.84	9	14.75
Dermatology	2	2.08	5	5.95	3	3.70	3	3.95	3	4.92
Radiology	3	3.13	3	3.57	8	9.88	13	17.11	9	14.75
Community Medicine	0	0.00	2	2.38	2	2.47	1	1.32	1	1.64

Ten selected reasons of rejecting community medicine were given to the students and they were asked to score each of the reasons in a scale of 5. Mean score of the reasons were calculated on Likert Scale. In the present study, higher number (18: 62.1%, n=29) of male participants desired to take community medicine as a future career option in comparison to females. Although more male participants chose community medicine in their top three preferred subject of choice for post graduation, the gender of the students plays no significant role for doing so. (P= 0.136, Table 4). "I cannot earn name/fame compared to other subjects", "I cannot earn social recognition", "I cannot earn as much as other subjects" ranked top in MLS (Mean score on Likert scale) table. Interestingly, "I don't like the subjects" was the least cited reason of rejection with MLS less than 3.

Table: 3 - Reasons for Rejecting Community Medicine as career option:

Rank	Reasons of Rejection	Mean score on Likert Scale(MLS)
1	I cannot earn name/fame compared to other subjects	3.52
2	I Cannot earn social recognition	3.47
3	I cannot treat patients directly	3.44
4	I cannot earn as much as other subjects	3.40
5	Not a well-focused specialty in India	3.36
6	My peers & seniors do not give a good feedback	3.27
7	I cannot have a healthy personal life	3.12
8	I have to deal with persons of other profession regularly	3.08
9	I am not impressed with anyone in this field	2.89
10	I don't like the subject	2.84

Table: 4 – Association of Gender and Community medicine preference using Chi-square test:

	Boy	Girl	P
Com. Med Chosen	18	11	0.136
Total Nos. of participants	194	204	

Table: 5 – Association of Community medicine preference and presence of doctor in family using Chi-square test:

	Doctor Present in family	No Doctor in family	P
Com. Med Chosen	9	20	0.0147
Total Nos. of participants	61	337	

However, during the study, when students were questioned about their views on community medicine, positive views of some of the respondents were also witnessed. For many participants, Community medicine meant WHO job, peaceful life, Govt. officer jobs and Administrative posts, International assignments, money, name and fame ahead.

The respondents also suggested some valuable feedback on asking 'how to make community medicine interesting career choice for budding doctors'. Some of the feedbacks were "good financial incentives after completing PG", "more govt. schemes and a clean process of selection of members, implementation, and execution of the schemes", "more job opportunities", "lesser theory and research based orientation of the subject", "bring forward eminent personalities in this field", "aware students about the career options scope ahead".

IV. Discussion

We developed a conceptual framework based qualitative method on the responses offered by the MBBS students towards the career options of medical students and fresh graduates (Interns). The career choices of undergraduate medical students will have an effect on the national availability of healthcare manpower. Also, the choice of the different available specialties will ensure equal distribution of doctors across all fields.

Roy B et al. had found that about 80% of medical students who opted for Social Medicine/ Public Health were males.[9]. However, the Dutch study by Soethout MB had reported higher mean preference for youth health care (a Public Health specialty, with similarities to Community medicine) in women than men.[10]In the present study, those having a doctor in the family were more likely to opt for Community medicine. These findings are in the contrary to that of Roy B et.al. where none of the students whose father was a doctor and only 15% of those whose father was a doctor had opted for Social Medicine/Public Health. [9]

In our study, we found almost all the students (99.3%) wanted to pursue post graduation. Our findings are similar to the studies from Delhi and Manipal where 83.5% and 99.2% students wanted to pursue post-graduation respectively.[2,3,4]. Though we did not assess the reason for choosing a particular specialty as a career choice, we presume some underlying factors could be personal interest, experience during MBBS academic period and clinical rotations, feedbacks from seniors, family expectations, job opportunities and

financial rewards. Considering the fact that India is a developing country, financial rewards could be one important factor in choosing a career. This could be the reason why most of the students have chosen specialties which have a proven record of financial gains.

The findings in our study on reasons students shying away from community medicine for 'financial reasons', 'less name and fame in society', 'lesser known future paths', 'no role models' are similar to the findings of Schafer S et.al. who found insufficient prestige as one of the foremost reasons for students rejecting Family Medicine. [11]

For a commoner, the doctor who cures a patient is the real doctor. The patient, his family and the community members everybody stays grateful to him. The low image of Doctors with Community Medicine specialty in the society can be explained by the fact that the achievements of public health and preventive medicine could not merely be recognized by people. On the other hand, the silent victories of public health remain unappreciated. For example, India, announced as Polio free country in 2014. To common people it's the job done by governments. The planning, proposals, hard works by community medicine/public health professionals remain unmentioned. Moreover, public health, unlike clinical practice, is at best a zero gratitude job. [12]

There is a positive attitude toward Community Medicine as a subject, but students are afraid take up this subject as it is perceived to be a "boring", "research oriented", "statistics based", "difficult" subject.

Another important observation was that MLS value of 3.27 was obtained for the reason "My peers & seniors do not give a good feedback" from student for not opting community medicine. This issue needs to be handled well; else it would dampen the spirits of those thinking of Community medicine as a future career option, and the subject will continue to be a compromise rather than a choice. Various strategies like group discussions, field visits, on-field teaching, interactive sessions of the students with eminent public health personalities, application and relevancy oriented teaching, Govt. policy awareness campaigns etc. will go a long way. The Medical Council of India 2015 vision document provides flexibility to adopt such innovative methods in various specialties.[13]. Another alarming response given by the students was that the community medicine is not a clinical subject. This issue is to be handled by the teachers, seniors and the whole system, because the clinical outlook as such starts from this branch of medicine.

V. Conclusion

Looking into subject matter of Community Medicine, we find that our discipline overlaps and intersects with other disciplines like Pediatrics (in early neonatal care, infant growth, immunization, childhood nutrition and illnesses etc.), Obstetrics & Gynaecology (in antenatal care, maternal health and nutrition, safe pregnancy and maternal survival), General Medicine (in identifying the risk factors and treating the communicable and non-communicable diseases),and Public Health (Health system management, health system strengthening, health system researches, national health program operation, health policy formulation etc.) Thus, community medicine specialist is an epidemiologist, a health manager, a health advocate, a health communicator, as well as a family physician.[14]. Practicing the Public health can certainly be a satisfying career, as the community medicine specialists are popularly called as "Five Star Doctors".

Numerous public health professionals are already working in various national and international organizations like WHO, UNICEF, CARE, UNFPA, NIHFW, NICD, MOHFW and ICMR etc. International placements are offering tax free handsome salary, huge perks, flexi work hours, opportunities for worldwide travelling, avenues for career growth. The organization such as Public Health Foundation of India (PHFI) is setting up the chain of Indian Institutes of public Health in India and offering a huge salary to the faculty. It also sponsors younger public health professionals to Public health institutes of excellence worldwide to develop them as future faculty members.[15]. The MBBS students should be made aware of the facts, schemes and prospects. Teachers, Hospitals and Governments shall walk forward to increase interest amongst the students for community medicine as career option.

On the contrary many state governments send their medical officers to do MD (PSM/CM), diploma in public health (DPH), Diploma Maternal and Child Health (DMCH), Masters in Public Health (MPH) and Master of Applied Epidemiology (MAE) etc. But, there is a lack of any definite plan to offer them suitable placements after completing the degree. Many gets re-appointed as general duty medical officers in the PHCs and other peripheral health institutions. Many posts which require public health specialist skills have been filled from the pool of senior general duty doctors and bureaucrats. This creates discouragement, frustration and resentment among the doctors who choose to do and who are pursuing post graduation in Community medicine and Public health discipline. Governments should come forward with clearly defined policy regarding the career development for the public health specialists.

The Teachers, peers in the field of Community Medicine should take responsibility and design MBBS curriculum in such a way that it attracts students. The objectives of the course should be clearly told to the

students; appropriate teaching and learning experience should be offered, and a valid assessment process should be followed.

Fear of not being able to earn name/fame, recognition in society and job satisfaction in comparison to other clinical subjects along with lack of information regarding future career prospects seem to be the most important causes for rejection of Community medicine as a career option.

The subject needs to be projected well amongst undergraduate medical students as a lucrative career option by sharing of experiences by eminent persons in the field. Interest in social service can be used to advantage to attract more students towards our beloved discipline, as it offers the best opportunities for medical students with aptitude for social service.

Limitation of the study:

This study was restricted to just one medical college of eastern India because of insufficient manpower and lack of monetary resources. A multicentric study over a wide geographic area would give a more acceptable result as that would show a better representation of the students in the state or the country.

A proper discussion with the medical students by the investigators would have been helpful to increase awareness about the subject; and this discussion cannot be an one time affair, useful career counseling should be conducted amongst the medical students periodically so that they have a clear image about the importance and scopes of community medicine and public health which will hopefully attract more medical graduates towards this fraternity.

There is also a possibility of a slight change in preference during the course of MBBS but this factor was excluded as it could be better gauged by a prospective study.

Acknowledgements

We are grateful to all the medical students and interns who participated in this study and the post graduate students of the Department of Community Medicine, HMCH, Bhubaneswar for their help and supports. We are also thankful to all the faculties of Department of Community Medicine, Hi-Tech Medical College & Hospital, Bhubaneswar for their constant encouragement.

Declaration of conflicting interests:

The authors declare that there is no potential conflict of interest with respect to the research, authorship and/or publication of this article.

Funding: The authors received no financial support for the research, authorship and/or publication of this article.

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