International Journal of Community Medicine and Public Health
Muthamilan OL et al. Int J Community Med Public Health. 2022 Aug;9(8):3225-3229
http://www.ijcmph.com
pISSN 2394-6032 | eISSN 2394-6040

DOI: https://dx.doi.org/10.18203/2394-6040.ijcmph20222028

Original Research Article

Perception of community medicine as a curriculum and career option among medical students

Om Lokesh Muthamilan*, Pragati Amit Hapani, Sakshi Beotra, Shashidar Kotian, Ishan Goyal

Kasturba Medical College, Mangalore, Karnataka, India

Received: 16 June 2022
Revised: 10 July 2022
Accepted: 11 July 2022

***Correspondence:**
Dr. Om Lokesh Muthamilan,
E-mail: lokesh.fnc@gmail.com

ABSTRACT

Background: In India, medical curricula have not been kept up to date with changes in public health, demography, and health policies. Clinicians serve as role models for students in medical colleges, and CM is not seen as an appealing career option by students. Hence this study was designed to analyze the perceptions and attitudes of medical undergraduates towards the relevance of CM as a future career option.
Methods: This cross-sectional study was done in a Kasturba medical college, Manipal academy of higher education, located in Mangaluru, conducted especially for undergraduate medical students consisting of 440 medical students (MS) formulate this study population who belonged to different socio-demographic and regional backgrounds.
Results: This study on the perceptions of the MS in LCM as part of their MBBS syllabus and their preference for the subject as a career path. Out of 440 MS, the rate of response was 100%. Among them, 237 (53.8%) were male and 203 (46.2%) were female. In our study, 93.9% showed a positive attitude in gaining skills to understand the research in their period of CM postings, 89.7% suggested having an understanding of concepts in CM followed by preventive measures against diseases (86.6%), the real-life health issues of the community
Conclusions: The prime motive was a desire to pursue a career in clinical subjects, students must learn community medicine subjects as well, and they must be better informed about the chances were available for CM specialists to work with international, national and state healthcare organisations and research institutes.

Keywords: Community medicines, Medical students, Perceptions, Attitudes, Career

INTRODUCTION

Globally, India has the most medical colleges around 91415 MBBS graduates completing every year from 607 colleges as per National medical commission (NMC).[1] In India, medical curricula have not been kept up to date with changes in public health, demography, and health policies.[2] Rather than a population-based preventative health care strategy, health practitioners are taught a treatment-oriented therapeutic approach. The importance of basic health care is being ignored, and there is a growing trend toward super specialization in numerous medical specialties.[3] In India, the high-level expert panel on universal health coverage advised that the MBBS syllabus be altered to include a greater emphasis on preventative, promotive, and rehabilitative medicine.[4] Community Medicine (CM) is a branch of medicine that provides a wide variety of health services, including prevention, promotion, treatment, and rehabilitation.[5] It is a specialty that works with public (both sick and well), assesses public needs, develops, implements, and evaluates services to satisfy those needs, as well as

conducts research and teaching.[6] Based on the suggestions of the medical education conference in 1955, departments of preventive and social medicine were created in all medical institutions across the country. In the 1980s, the phrase "preventive and social medicine" was changed to "community medicine." Today, the specialty has grown into an area of study that helps society progress, particularly in developing nations such as India. However, this crucial aspect of medical education is being overlooked, and the syllabus must have evaluated, revised regularly to reflect current public health issues and society's health demands.[6]

The goal of teaching CM in the undergraduate medical syllabus, in 2009, the expert committee of the regional office of South-East Asia of the world health organisation (WHO) is to ensure that the medical graduate has acquired broad public health competencies needed to solve community health problems with an emphasis on health promotion, disease prevention, cost-effective interventions, and follow-up.[7] Different components of CM disciplines are educated during the first, second and third years of the MBBS curriculum to fulfil these aims.[8,9] The medical council of India (MCI) has raised the postgraduate seats in CM across the nation to help medical graduates learn more about the field.[10,11] Clinicians serve as role models for students in medical colleges, and CM is not seen as an appealing career option by students. Family influence, foreign opportunities, gender, personal interest, intellect, talents, financial rewards, time commitment, work stability, societal respect, peer pressure, and future professional progression are all elements that impact whether or not to pursue post-graduation.[12] Few researchers have examined how students felt about learning CM as part of their undergraduate medical curriculum.[13]

Objectives

The objective of this study is to learn the opinions of students across all years of the MBBS course regarding the community medicine curriculum as it is currently being taught, and to infer how this knowledge can be used to shape the curriculum moving forward.

METHODS

This cross-sectional study was done in a Kasturba medical college, Manipal academy of higher education, located in Mangaluru, conducted especially for undergraduate medical students consisting of 440 medical students (MS) formulate from July 2017 to December 2017. In this study, All MS undergraduates who are willing to participate in this questionnaire were included, First year MS and not willing undergraduates were excluded. This study population who belonged to different socio-demographic and regional backgrounds. We adopted the non-random quota sampling method for this study. All the 440 MS were circulated a structured self-administered questionnaire to explore, evaluate the perception of CM for data collection. The questionnaire was duly filled out and submitted by everyone. The rate of response from the students was 100%. All the study participants gave written informed consent after being informed about the study's objectives before circulating a structured self-administered questionnaire. Data was collected using a structured questionnaire consisting of basic information about the study subjects and details about their perceptions of CM. To learn CM (LCM), a five-point Likert scale strongly disagree, disagree, neutral, agree and strongly agree was used to evaluate the perception of the MS. Data were analysed using the statistical package for social-sciences (SPSS) version 17.0.

RESULTS

This study on the perceptions of the MS in LCM as part of their MBBS syllabus and their preference for the subject as a career path. Out of 440 MS, the rate of response was 100%. Among them, 237 (53.8%) were male and 203 (46.2%) were female. Element of CM by the perception of MS: All the students had a positive attitude (strongly agree and agree) towards the gaining skills to understand the research (93.9%), understanding of concepts in CM (89.7%), preventive measures against diseases (86.6%), the real-life health issues of the community (85%), field visits need to be increased to make the subject more interesting to learn (83%), gained knowledge will be useful in my career as a doctor (82%), community medicine should be part of MBBS curriculum (77.7%), knowledge of Govt. health schemes is necessary for every doctor (71.4%), environmental sanitation is an important topic in community medicine (68%), subject helped me to understand and get the knowledge about management of epidemics (67.7%), Family and social medicine is relevant. (65.7%), understand other clinical subjects better (62.3%), CM as a career option (58.6%), and improving skills in problem-solving (47%) (Table 1). Whereas some of the neutral perceptions like epidemiological studies helped in problem-solving skills (39.1%), improved skills in problem-solving (33.4%), biostatistics is relevant in medical education (33.2%), and certain disagree and strongly disagree were in and the topics were meaningless and boring. (73.9%), feel curative medicine is more relevant than preventive medicine (69.3%), feel only the knowledge of clinical subjects is paramount to the development of my diagnostic skills (61.8%), and feel learning the history of medicine will make me a better doctor (56.4%) (Table 1).

DISCUSSION

According to the findings, a large number of students had a good attitude about the course. The students' favourable attitude may be attributed to the course's content, which is well-organized and taught by community medicine specialists who can integrate the course's contents to real-world health challenges in the area.

Table 1: Element of CM by the perception of MS (n=440).

Perception	Strongly agree N (%)	Agree N (%)	Neutral N (%)	Disagree N (%)	Strongly disagree N (%)
I understand the concept of community medicine.	144 (32.7)	251 (57)	27 (6.1)	18 (4.1)	0 (0)
It helps me understand other clinical subjects better	105 (23.9)	169 (38.4)	82 (18.6)	84 (19.1)	0 (0)
It helps me improve my skills in problem-solving.	65 (14.8)	142 (32.3)	147 (3.4)	83 (18.8)	3 (0.7)
The gained knowledge will be useful in my career as a doctor.	151 (34.3)	210 (47.7)	64 (14.5)	13 (3)	2 (0.5)
I gained skills to understand research.	271 (61.6)	142 (32.3)	15 (3.4)	11 (2.5)	1 (0.2)
It helps me to understand the real-life health issues of the community.	160 (36.4)	214 (48.6)	51 (11.6)	14 (3.2)	1 (0.2)
I find the topics meaningless and boring.	2 (0.5)	31 (7)	82 (18.6)	243 (55.2)	82 (18.6)
Community Medicine should be part of the MBBS curriculum	119 (27)	223 (50.7)	70 (15.9)	26 (5.9)	2 (0.5)
I feel only the knowledge of clinical subjects is paramount to the development of my diagnostic skills.	5 (1.1)	74 (16.8)	89 (20.2)	220 (50)	52 (11.8)
I feel curative medicine is more relevant than preventive medicine.	6 (1.4)	65 (14.8)	64 (14.5)	254 (57.7)	51 (11.6)
Learning about epidemiology helped me in my problem-solving skill	71 (16.1)	103 (23.4)	172 (39.1)	90 (20.5)	4 (0.9)
Knowledge of Govt. health schemes is necessary for every doctor	200 (45.5)	114 (25.9)	99 (22.5)	24 (5.5)	3 (0.7)
It helped me to understand preventive measures against diseases	171 (38.9)	210 (47.7)	44 (10)	14 (3.2)	1 (0.2)
The subject helped me to understand and get the knowledge about management of epidemics	112 (25.5)	186 (42.3)	115 (26.1)	25 (5.7)	2 (0.5)
I feel field visits need to be increased to make the subject more interesting to learn	111 (25.2)	254 (57.7)	47 (10.7)	26 (5.9)	2 (0.5)
I feel learning the history of medicine will make me a better doctor.	34 (7.7)	71 (16.1)	87 (19.8)	231 (52.5)	17 (3.9)
I feel biostatistics is relevant in medical education.	18 (4.1)	40 (9.1)	146 (33.2)	192 (43.6)	44 (10)
I feel CM is a career option.	68 (15.5)	190 (43.2)	84 (19.1)	94 (21.4)	4 (0.9)
I feel environmental sanitation is an important topic in community medicine.	97 (22)	202 (45.9)	71 (16.1)	64 (14.5)	5 (1.4)
I feel learning about family and social medicine is relevant.	128 (29.1)	161 (36.6)	78 (17.7)	71 (16.1)	2 (0.5)

Among 440 MS, all agreed to participate and completed the LCM which is correlated with both Murugavel et al and Singh et al resulting that 96.8% and 98.9% respectively of MS opined that LCM is mandatory.[14,15] In our study, 93.9% showed a positive attitude in gaining skills to understand the research in their period of CM postings same results were obtained in Sadawarte et al and they stated that this is crucial because the more innovation and enhance have conducting medical research, to better their knowledge of literature reviews, critical evaluation of research papers, and report writing.[16] Our study shows that 89.7% suggested having an understanding of concepts in CM followed by preventive measures against diseases (86.6%), the real-life health issues of the community (85%), whereas Murugavel et al reported that 83% for understanding the concepts of CM, 80.7% preventive measures against disease and 79.8% real-life health issues.[14] Community-based learning programs that use various approaches to expose students to the structure, functioning, and perceived needs of the community may play a major impact in increasing students' enthusiasm for learning and choosing a career option. In this study, nearly 90% felt that field visits need to be appreciated to make the subject

more interesting to learn similar results were reported in Sadawarte et al (96.8%) and Sharma et al (94.3%) than most of the MS had agreed that more field visit is essential to include to the curriculum.[16,17] This has been extensively studied in the literature, which emphasizes the importance of research programs, morbidity surveys, demographic, community diagnosis, and family visits. The various study reported that in Mumbai 40% were chosen CM for their career, on the contrary, our study results showed that 58.6% have chosen CM as a carrier option. A study conducted by Murugavel et al reported that 21.8% showed their interest to do CM as a specialization.[14] Kar et al reported that psychiatry and CM were not preferred by the MS as their profession and emphasized the requirement to enhance the MS interest in these subjects.[18] MS major reason for not selecting CM as a specialization is their enthusiasm for clinical specialties. Similar results were discussed in their study done by Singh et al[19] and Murugavel et al.[14]

Limitations

This study was limited in the fact that students from only one college were surveyed. Further studies with more participants from various other colleges could lead to results which are more representative of the student body as a whole.

CONCLUSION

This research examines undergraduate medical students' perspectives on learning community medicine as part of their MBBS program. Though the students appreciated the importance of studying the subject, they chosen field-based classroom instruction. Students have suggested a variety of goals for improving the course's quality, including more practical sessions with greater student engagement, appropriate time allotted for undertaking research projects etc. Primary health care physicians are needed in developing countries like India to serve the population and address common medical and public health issues. If adequate remedial actions are not done, fewer students will choose community medicine as a specialty in the future. Though the prime motive was a desire to pursue a career in clinical subjects, students must learn community medicine subjects as well, and they must be better informed about the chances were available for CM Specialists to work with international, national and state healthcare organisations and research institutes.

Funding: No funding sources
Conflict of interest: None declared
Ethical approval: The study was approved by the Institutional Ethics Committee

REFERENCES

1. MBBS colleges in India. Available at: https://www.nmc.org.in/information-desk/for-students-to-study-in-india/list-of-college-teaching-mbbs/. Accessed on 16 October 2021.
2. Garg BS. Teaching/Training and Practice of Public Health/PSM/Community Medicine. Indian J Commu Med. 2017;42(3):127-30.
3. Health coverage for India. Available at: http://planningcommission.nic.in/reports/genrep/rep_uhc0812.pdf. Accessed on 16 October 2021.
4. Park K. Man and medicine: towards health for all. In: Park‟s textbook of preventive and social medicine. 24th ed. Jabalpur: Banarsidas Bhanot Publishers; 2017:1-10.
5. Kumar R. Clinical practice in community medicine: challenges and opportunities. Indian J Commu Med. 2017;42(3):131-3.
6. Review of preventive and social medicine. Report of the expert group meeting. Available at: https://apps.who.int/iris/bitstream/handle/10665/206329/B4482.pdf;sequence=1. Accessed on 20 October 2021.
7. Garg BS. Teaching/training and practice of public health/PSM/community medicine. Indian J Commu Med. 2017;42(3):127-30.
8. Khader Y, Al-Zoubi D, Amarin Z, Alkafagei A, Khasawneh M, Burgan S, et al. Factors affecting medical students in formulating their specialty preferences in Jordan. BMC Med Educ. 2008;8:32.
9. Rehman A, Rehman T, Shaikh MA, Yasmin H, Asif A, Kafil H. Pakistani medical students‟ specialty preference and the influencing factors. J Pak Med Assoc. 2011;61(7):713-8.
10. Rolfe IE, Pearson SA, Cleary EG, Gannon C. Attitudes towards community medicine: a comparison of students from traditional and community-oriented medical schools. Med Educ. 1999;33(8):606-11.
11. Critchley J, DeWitt DE, Khan MA, Liaw S. A required rural health module increases students‟ interest in rural health careers. Rural Remote Health. 2007;7(2):688.
12. Wright S, Wong A, Newill C. The impact of role models on medical students. J Gen Intern Med. 1997;12(1):53-6.
13. Chakrabarti R, Wardle K, Wright T. Approaching an undergraduate medical curriculum map: challenges and expectations. BMC Med Edu. 2021;21:341.
14. Murugavel J, Chellaiyan VG, Krishnamoorthy D. Attitude toward learning of community medicine: A cross-sectional study among medical school students. J Fam Med Prim Care. 2017;6(1):83.
15. Singh S, Pruthi S. Undergraduate medical research: tapping the untapped potential. Indian J Med Res. 2010;131:459-60.
16. Sadawarte MK, Kakeri MK, Nandanwar DY. Community medicine: perceptions among medical students and career preference: a cross sectional study. Int J Commu Med Public Health. 2017;4(12):4577-82.
17. Sharma D, Gupta V, Shah U, Saxena K, Mavli A, Singh U. A study on medical students‟ satisfaction and effectiveness of teaching methods in community

medicine in a rural medical college at Anand, Gujarat with specific focus on non-classroom teaching. Int J Med Sci Public Health. 2016;5(10):2098.
18. Kar SS, Ramalingam A, Premarajan KC, Roy G. Do medical students prefer a career in community medicine?. Int J Prev Med. 2014;5(11):1468-74.
19. Singh G, Agarwal V, Misra SK. Analysis of medical students perception for community medicine as career option and subject. Indian J Commun Med. 2018;43(1):56-7.

Cite this article as: Muthamilan OL, Hapani PA, Beotra S, Kotian S, Goyal I. Perception of community medicine as a curriculum and career option among medical students. Int J Community Med Public Health 2022;9:3225-9.