



ATTITUDE TOWARDS LEARNING OF COMMUNITY MEDICINE AND CAREER PREFERENCE AMONG MEDICAL COLLEGE STUDENTS IN TAMIL NADU – A CROSS SECTIONAL STUDY

Community Medicine

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ABSTRACT

To assess the attitude towards learning of Community Medicine (CM) as a subject and preference of choosing CM as the career among undergraduate students. A cross sectional study was done among undergraduate medical students by using population proportion to sample size and by simple random sampling technique. About 89% of students agreed learning CM is essential for under graduation but only 27% of the students preferred doing CM as their career. By improving teaching modalities and making subject more interesting, the students will be motivated to choose the subject as their career preference.

KEYWORDS

Community Medicine, Career preference, medical students

INTRODUCTION

Community Medicine, previously named as public health, community health, preventive and social medicine, is a branch of medicine that deals with the health promotion and disease prevention involving the participation of the community through health care delivery.^{[1][2]} The medical curriculum of community medicine focuses on contemporary health systems, community health problems, needs and issues of public health importance.^[3] The guidelines and regulations of National Medical Commission emphasizes to include Community Medicine in Phase I, II, III of MBBS curriculum and also during internship.^[3] The importance of Community Based Medical Education (CBME) in undergraduate curriculum has been validated in medical education and practice.^{[4][5]} The shift from curative to preventive medicine has made CBME important to the progress of medical science. This subject needs to understand and remember many concepts and formulas during the period of study.^[5] Though only small proportion of the medical graduates prefer choosing this subject as their specialty, a thorough knowledge about the subject should be provided in the undergraduate training program itself.^{[1][6][7]} In medical colleges the department of CM focuses on teaching and training medical students with an aim to ensure value-based education and providing service to marginalized groups, strengthening the skills and attitude input to help them serve later as effective doctors and leaders in the society.^[3] The responsibility of a doctor includes the care of the individual, care of the community and role as a teacher.^[8] Majority of the students wanted to pursue their specialization in clinical subjects, other than Community medicine.^{[8][9][10]} So to find out the reason a study was planned to assess the attitude and general perception towards learning of community medicine as a medical subject and to analyze the student's preference of community medicine as a career choice among undergraduate medical students in a private medical college in Chengalpattu district.

METHODOLOGY

Study design: An institutional based cross-sectional study

Study setting: The study was conducted in Karpaga Vinayaga Institute of Medical Science and Research Centre, Chengalpattu district, Tamil Nadu.

Study duration: The study was done from December 2020 to January 2021.

Study population: Undergraduate medical students from first year to internship

Sample size and sampling: The sample size was calculated using the formula $n = Z^2 pq/d^2$ (where $Z = 1.96$ at 95% confidence; a similar study done by Murugavel et al^[2] reported the prevalence of medical students choosing Community Medicine as post-graduation was 21.8% with an allowable error of 20% of p. Adding 20% for non-response/absenteeism or rejection for incomplete information, The sample size thus yielded was 431 of which 437 responses were received during the survey. The final samples in each batch were selected using population

proportion to sample size. In each batch, simple random sampling technique was used in selecting the study subjects.

Inclusion & Exclusion criteria: All the students from first year to the internship and those who were willing to participate in the study were included in the study. Those students who were absent for a long period was excluded from the study.

Study instruments: A semi-structured questionnaire consisted of the following session such as socio-demographic data, attitude questions towards learning of community medicine, preference of doing post-graduation in community medicine in the future and the reason for the same and their interested subjects. A three-point Likert scale (Agree, Neutral and Disagree) was used to assess the perceptions of the medical students in learning Community Medicine.

Data collection: The study was conducted after obtaining the necessary clearance from the Institutional Human Ethics committee. The purpose of collection of data was explained to the respondents after brief introduction. The eligible respondent was interviewed after obtaining the written informed consent. Confidentiality was maintained.

Data analysis: Data was entered in Microsoft Excel sheet 2016. Analysis was carried out by using Statistical Package for the Social Sciences (SPSS) version 20. Descriptive statistics such as mean, standard deviation ($m \pm SD$) and percentage were calculated. Binary logistic regression was used to calculate Chi square test for statistical analysis to find out any association between variables, P value < 0.05 was considered as statistically significant and Odds ratio to find out the strength of association between the variables

RESULT-

Among the total 437 study participants, majority of the students (61.1%) were female. The age group of the students ranged from 18 to 24 years with mean (SD) of 21.02 ± 1.44 . About 27% of the students preferred doing CM as their career. When comparing with the year of study, only 7.6% interns reported that they will choose CM as their profession. There was statistical significance found between year of study and preference of choosing CM as the career. There were about 42 parents who were from medical professional, of which 16.7% prefer doing CM as postgraduation. About 255 students were interested in studying CM, among them, 38.4% responded that they will choose CM as career. The difference observed had statistical significance (<0.05). Those students who were interested in studying the subject, prefer choosing CM as their career is 4.9 times that of not interested in the subject. About 89% of the students had agreed that learning CM is essential in MBBS course and about 87% had agreed that knowledge about CM is essential for clinical practice. Only 3.4% of the students had agreed that there is no need to learn CM to become a doctor and 3.7% of the students had agreed CM had nothing to do with the hospitals and patient care. Whereas 32.7% of the students had agreed that CM has a high status in the medical field. 40% of the students had

reported that the subject was more theoretical than practical. Only 19.5% students believed that the salary provided for CM profession was comparable to other profession but 31.6% of students agreed that a career in this subject will bring recognition in society. However only 24.5% of students believed that faculties who had chosen this subject as career were satisfied. When comparing with all the subjects in MBBS only 9.1% of students had reported that CM was their most interested subject.

DISCUSSION-

The present study was done to assess the attitude towards learning of CM as a subject and preference of choosing CM as the career among undergraduate students. Though majority (58.4%) of the students liked to study community medicine subject, unfortunately only 16.7% of the students had reported that they prefer taking CM for postgraduation however 10.65% students said it is good only for MBBS level no need of post-graduation and 20.33% responded that there were lots of job opportunities. The major reasons for choosing CM as a career where it was a field of disease prevention hence control of epidemics (65.25%), Includes medical knowledge and administrative skills (62.71%), opportunity to serve community (59.32%). Whereas the reasons for not preferring CM as a career was interested in other subjects (81.5%), lack of interest in statistics (45.76). Among 255 students who liked the subject, majority (61.6%) were females. Similarly, 118 students responded that they prefer doing CM for postgraduation with majority (61%) were females. Thus about 38.13% students had responded CM is a good career for girls. With the advanced year of study, the preference for choosing CM as career decreases among students. Even though 45.5% of students had agreed that learning CM was interesting, 11.28% of students had difficulty in understanding the concept, 11.91% replied CM was only theoretical not practical and 12.22% it is less clinical utility. About 52.54% students had answered this subject is research oriented but only 32% students were interested in doing research in CM. Majority if the students were interested in studying General Medicine (34.5%) and surgery (23.5%) as their most interested subjects.

CONCLUSION-

In this study most of the students were interested in studying CM but only few of them had preference in taking the subject as their career of which most of them were girls. As the year of study advances, their desire to choose the subject as career also reduced. Appropriate teaching methods, creating interest in the subject and orienting them the opportunities available to work with state, national and international healthcare organizations and research institutes will inspire the students to choose CM for their career.

Table 1: Association between socio-demographic characteristics of medical students and community medicine (CM) as their choice for post-graduation.(n=437)

Socio demographic data	Prefer CM as a career (118)	Does not Prefer CM as a career (319)	Total (437)	Odds ratio (CI)	Chi-square(P value)
Gender					
Male	46(27.1)	124(72.9)	170(38.9)	0.922 (0.576-1.475)	0.000 (0.983)
female	72(27)	195(73)	267(61.1)	Ref	
Age category					
< =20 years	63(35.6)	114(64.4)	177(40.5)	0.620 (0.617-1.106)	11.139 (0.001)
>20 years	55(21.2)	205(78.8)	260(59.5)	Ref	
Year of study					
Interns	9(10.3)	78(89.7)	87(19.9)	0.475 (0.171-1.316)	15.896 (0.003)
Final year	27(29.3)	65(70.7)	92(21)	1.263 (0.533-2.993)	
Third year	26(29.9)	61(70.1)	87(19.9)	1.278 (0.616-2.649)	

Second year	27(31.4)	59(68.6)	86(19.7)	0.742 (0.378)	2.518 (0.113)
First year	29(34.1)	56(65.9)	85(19.5)	Ref	
Parent's occupation					
Medical	7(16.7)	35(83.3)	42(9.6)	0.512 (0.221-1.186)	2.518 (0.113)
Non-Medical	111(28.1)	284(71.9)	395(90.4)	Ref	
As an undergraduate, interested in studying Community Medicine					
Yes	98(38.4)	157(61.6)	255(58.4)	4.917 (2.844-8.500)	40.575 (0.000)
No	20(11)	162(89)	182(41.6)	Ref	

Table 2: Perception of learning Community Medicine among study participants(n=437)

Statements	Agree (%)	Neutral (%)	Disagree (%)
1. Learning community medicine is essential in MBBS course	89	9.6	1.4
2. Learning CM is interesting	45.5	41.6	12.8
3. Knowledge about CM is essential for clinical practice	87	11.7	1.4
4. There is no need to learn CM to become a doctor	3.4	10.1	86.5
5. CM has nothing to do with hospitals and patient care	3.7	11	85.4
6. There is no much skills to be acquired in CM	9.6	20.1	70.3
7. CM is more theoretical than practical	40	27	33
8. CM is only about disease prevention and nutrition	26.8	31.6	41.6
9. CM gives an overall view of a community's medical needs	87.2	10.5	2.3
10. CM has a high status in the medical field	32.7	48.7	18.5
11. CM provides a salary which is comparable to other professions	19.5	59.3	21.3
12. Interested in doing research in CM	32	37.3	30.7
13. A career in CM will bring you recognition in society	31.6	54.9	13.5
14. Faculty and Postgraduates are satisfied after choosing CM	24.5	66.4	9.2

*Multiple responses

REFERENCES:

1. Thakur AB, Upadhyay R, Wavare RR, Deshpande AR. Perception Towards Community Medicine as a Subject and Career Option among Medical Students in a Medical College, Indore, Madhya Pradesh. *Natl J Community Med.* 2016; 7(5):430-434.
2. Murugavel J, Chellaiyan VG, Krishnamoorthy D. Attitude toward learning of community medicine: A cross-sectional study among medical school students. *J Family Med Prim Care* 2017;6:83-7.
3. Bhattacharyya H, Medhi GK, Pala S, Sarkar A, Kharumjai OM, Lynrah W. Early community-based teaching of medical undergraduates for achieving better working skills in the community. *J Edu Health Promot* 2018;7:161.
4. Kalaiselvan Ganapathy and Amol R Dongre, Process of Developing of Community Based Medical Education Programme Curriculum. *Journal of Clinical and Diagnostic Research.* 2018;12(4):JA01-JA05
5. Medical student's perceptions regarding the curriculum in community medicine: A cross sectional study. Mukesh B, Sarika P, Amol K, Borde A N. *Indian Journal of Forensic and Community Medicine.* 2018;5(1):39-43
6. Wani R T, Nabi S S, Javaid S, Qazi T B, Dar H, Pandith S. Attitude towards learning community medicine as a Subject and career option among students in a medical College in Kashmir. *Indian Journal of Applied Research.* 2019;9(4):56-58
7. Angeline GG, Gopalakrishnan S, Umadevi R. Community medicine learning - medical students perspective. *Int J Community Med Public Health* 2019;6:367-73
8. Sadawarte MK, Kakeri MK, Nandanwar DY. Community medicine: perceptions among medical students and career preference: a cross sectional study. *Int J Community Med Public Health* 2017;4:4577-82
9. Kar SS, Ramalingam A, Premarajan KC, Roy G. Do Medical Students Prefer a Career in Community Medicine?. *Int J Prev Med* 2014;5:1468-74
10. Singh MK, Singh AK. Community Medicine as a Career Option! How is it Perceived by Medical Students?. *Natl J Community Med* 2013; 4(2): 241-246.