# **Short Communication**

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# Perception of medical student about community medicine as subject in Government Medical College Bhavnagar, Western India

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## **ABSTRACT**

The primary goal of teaching community medicine (CM) to medical students is to educate them to practice as community and first-level physicians. Correct attitude and interest toward subject are necessary to gain knowledge and skill for future medical practice. Objectives were to explore the perception of medical students regarding knowledge of subject and willingness to take subjects as future carrier. The study was conducted during the march 2022 involving final year student and interns of government medical college Bhavnagar. Ten in depth interviews of study subjects were taken. Saturation of responses was achieved after eight interviews additional 2 interviews taken to confirm the saturation. All interviews were audio-recorded after obtaining written informed consent, transcribed and analyzed in form of codes and categories. Student perceive health promotion, Research, Health education, early detection of disease were main domains. They refuse to take CM subjects as their carrier. With a dream to become a famous and earning doctor, they do not want CM subject. There is need of clinical exposure and awareness regarding future scope of subjects among students. Future study can evaluate impact of such interventions on medial students.

Keyword: CM, Carrier, Interest, Public health physician

# **INTRODUCTION**

The goal of medical education is to prepare future doctors with the skills they will need to perform their likely duties. Medical schools have a responsibility to direct their education, research, and service efforts toward resolving the most pressing health issues in the communities, regions, and countries they are mandated to serve. This responsibility is known as social accountability. In medical schools, the department of CM focuses on teaching and training medical students with the goal of ensuring value-based education and contributing in the development of a basic doctor of first contact. The primary goals of the CM programme are to provide undergraduate students with value education via service to marginalized communities, develop their capacities and attitudes input to aid students in becoming

competent medical professionals in the future and leaders in the community.<sup>2</sup> Visits to health facilities, communities, and families where health intervention programmes are being implemented should be included in the training program's practical components.<sup>2</sup>

With basic beliefs that are in line with the IOM definition, family medicine is the field that is most prepared to teach primary care.<sup>3</sup> The institute of medicine (IOM) has defined primary care as "the delivery of comprehensive, easily accessible health care by doctors who are in responsible for taking care of the majority of patients' needs, developing a long-term partnership with them, and working in the context of their family and community".<sup>4</sup>

A patient-centered team approach, the removal of access barriers, advanced information technology, an electronic

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health record, redesigned, more functional offices, a focus on quality and results, and improved practise finance are all features of the family medicine concept.<sup>5</sup>

Learning CM helps the learner in becoming a good management, teacher/educator, researcher, and clinician in additional to other professions.<sup>2</sup> Medical students are exposed to primary and secondary healthcare settings as well as promotional, preventative, curative, and rehabilitative health services through CM/public health (preventive and social medicine).<sup>2</sup> This empowers them to provide primary medical care to marginalized population of the community in accordance with national health goals and ministry of health's national strategy.<sup>2</sup>

Public health education must be an active process that is focused on the needs of the community and is also student-centered, inquiry-driven, evidence-based, and problem-solving.

The teacher's job is to help the students develop the necessary public health competencies through field-based experiential learning, which involves set time aside for practice, receiving feedback, and considering how it will be used in their future roles as primary care physicians.<sup>6</sup>

In order to make training student-centered, problemoriented, integrated, community-based, need-oriented, interactive, and problem-solving, formal and informal approaches should be encouraged whenever possible.<sup>2</sup>

Only 58 of the 3181 degrees given in 2001 CM, according to the national knowledge commission's 2005 report, indicating that few people chose to pursue postgraduate study in this field. Orienting students toward a community perspective and c omprehending student attitudes towards patient populations are crucial components of medical education and profe ssional growth. This study done over a period of over two month is set to look into the perceptions of final year students and intern of government medical college Bhavnagar regarding CM subjects.

# **METHODS**

## Research team

The first author was the principal investigator of the study, whereas the second was co-investigator. All authors were aware about qualitative research methods. All the in-depth interviews were conducted by the first and second authors. The first author is assistant professor in CM department, government medical college Bhavnagar. At the time of study she was working as senior resident in CM department, government medical college Bhavnagar. Second author is in final year. Before conducting this research both authors discussed the purpose of conducting this research and the potential benefits of its findings in the future with students and

interns. The discussion gave a clue to the potential study participants who were likely to be more vocal.

## Study design

In-depth interviews were conducted among the final year students and intern doctor of government medical college Bhavnagar (Gujarat state, western part of India) to explore their perceptions on CM subjects (knowledge and willing to take subjects as future carrier).

## Study setting

Government medical college Bhavnagar has one of the best faculties in the country is an acknowledged fact. It is this reason that medical college Bhavnagar is chosen over others by the brightest of students. In every batch of government medical college there are total 200 students are there. I have chosen final year student and intern doctors because final tear students have completed CM as subjects and intern are preparing for exam and they have decided something about their carrier. In depth interviews were taken in government medical college Bhavnagar.

## Inclusion criteria

Final year students and intern doctors were included in study. Study participants, who refused to give written informed consent to participate were excluded.

Study was conducted during March-May 2022.

# Sampling

Final year medical students and intern doctors who were more likely to respond were purposefully included in the study. After confirming eligibility, the author explained the benefit and purpose of the study using the participant information sheet. In-depth interviews were conducted after obtaining written informed consent.

# Data collection

An interview guide for in-depth interviews with basic demographic details of the study participants was used for data collection. Questions of the in-depth interview guide were focused on the knowledge about CM subject, role of public health physician and willingness of pursuing a post-graduation in the CM subject. The interviews were conducted at the government medical college Bhavnagar. No other person (other than investigators and participant) was present during the interviews. Interview guide was prepared in English and was later translated into Gujarati (the most used language in India) and pilot tested.

The interviews were conducted till saturation of response was achieved. After each interview, important points were noted down which were then compared in subsequent interviews to confirm saturation. Once saturation was believed to be achieved, two more

interviews were conducted to confirm it. Average duration of interviews was 10 minutes (ranging from 8-15 minutes). We conducted ten in-depth interviews to achieve theoretical saturation.

To maintain the quality of data, only one in-depth interview was carried out in a day. All interviews were audio-recorded with prior consent from study participants. There were no repeat interviews. The transcripts or analyses were not returned to participants for any comments or corrections.

## **Analysis**

The audio recordings were transcribed from Hindi to English in a Microsoft Word document. The transcripts were assigned codes and the codes were classified as categories (content analysis). The codes and categories were prepared in a Microsoft excel document. Analysis of the assigned codes was inductive in nature (led by data).

#### RESULT

A total of ten final year students and intern doctors government medical college Bhavnagar interviewed, out of which six were males and four were females.

I categorized the perception of CM subject among final year students and intern doctor into the themes-knowledge, role of public health physician and willing to take subjects in future carrier and enablers

## Knowledge

I have assessed the knowledge regarding CM subject among intern and final year students. They perceived that subject is about health promotion, health education, research, field work, prevention of disease, early detection of disease, to learn importance of health.

"Taking about iceberg phenomenon the ice above water level tip is other medical specialist that diagnosed and treat the disease while CM is the ice below water level which play an important role in maintaining good health of community," (intern doctor of government medical college Bhavnagar).

"Subject is all about prevention of disease before actually the disease occurs." (final year student).

"Subjects is about incidence, prevalence, demography and family planning services," (final year student).

"CM, we can say that it is home science where it involves many different families and health," (Final year students).

# Role of public health physician

Final year student and intern doctors perceive that public health physician can do research, field work apart from that they implement various program in PHC and community health center. During COVID pandemic they have done great work like isolation, quarantine apart from that they collect daily data of COVID patients admitted in hospital regarding bad availability, O<sub>2</sub> consumption, analyzed data and report writing etc.

"PSM doctors implement the program at primary health center level," (final year student).

"During COVID-19 pandemic they isolated and quarantine COVID-19 positive patients and their contacts," (Intern doctor).

"At medical college level they teach the medical student," (Final year student).

"In research PSM doctors has good contribution they do field work related to disease, they find out the risk factors and severity of disease. They investigate the outbreak and try to prevent it," (Intern doctor).

"PSM doctor take care about epidemic, endemic of all disease, find the risk factors and epidemiology of new disease," (Intern doctor).

"During COVID-19 pandemic they collect the data, enter the data and analyzed data," (Intern doctor).

"Earlier there was no importance to PSM but from recent COVID pandemic we learn scenario is changing because of PSM has increased from recent COVID-19 pandemic," (Intern doctor).

"National program are running just because of PSM only like anemia Mukt Bharat, PSM doctors distributed various iron tablets and just because of PSM people we can eradicated the polio," (Intern doctor).

"In research perspective they do various quantitative and qualitative studies," (Final year student).

## Willing to take subject in postgraduation

Most of student and intern except 2 don't want to make their carrier in CM subject. They felt no money in this subject, no interest and more interest toward clinical subjects, field work so they don't want to take it.

"I don't have an interest in the CM subject," (Intern doctor).

"I want to do my post-graduation in clinical *subject*," (Final year medical student).

"I want to earn more money, and this is not possible in CM subject," (Intern doctor).

"I don't like field work," (Final year student).

## **Enablers**

"I want to research in various field," (Intern doctor).

Some of final year students and intern doctor perceive that they have interest in CM they want to do research.

"I am interested in the family medicine," (final year student).

Table 1: Code and categories pertaining perception of medical student regarding CM subject.

Category	Subcategory	Code
Knowledge of PSM subject		Health promotion
		Service provider at gross root
		Prevention of disease
		Home science
		Bring awareness
		Research in various field
		Prevention of spread of disease
		Early detection of disease
		Importance of health
Role of PSM doctor	COVID-19	Prevention strategies
		Sanitation
		Chlorination
		Health program implementation
		Outbreak investigation
		Spread awareness
		Preventive measures
		Research
		Find risk factor
		Search epidemiology of disease
		Awareness of healthy lifestyle
		training
		Training
		Isolation
		Quarantine
		Policy making
		Contact tracing
		Data analysis
		Report preparation
Willing to take subject in future	Reason	No clinical exposure
		Not much money
		Field work
		Want to take clinical subjects
		Don't like subject
		No feel like a doctor
		No interest
Enablers		Research
Elianicis		Family medicine

# **DISCUSSION**

Present study highlights perception of final year student and intern regarding CM subjects. A world health organization expert group on teaching CM came to the conclusion that teaching public health and epidemiological skills is necessary for understanding disease dynamics for effective control, need-based health planning, efficient health surveillance as well as the monitoring programmes for aspiring health managers to develop the information management strategy.<sup>6</sup>

Present study shows study subjects perceive that CM subjects is about health education, health promotion, spread awareness, prevention and early detection of disease. Apart from that they have good knowledge regarding role of public health physician in medical college as well as in research. Most of student don't want to take CM subject in their post-graduation. They felt that field work, no clinical exposure, not much money and no fame in CM subject. They want to do work in clinical subject. Similar result found by study conducted in Agra, student feel branch has no scope with low salary and low satisfaction, rural work and no role models.<sup>8</sup> Study

conducted in south Indian medical college reported that most of the students showed a fairly good attitude towards CM subject and only 43% considered pursuing a post-graduation in the subject.<sup>2</sup> Study conducted in Arab universities reported that majority of the students had a positive attitude towards scientific research, while many perceived barriers were highlighted by the students such as a lack of time and adequate mentoring.<sup>9</sup> Study conducted among Canadian student reported that lack of clinical work, less money were the reason for not pursuing a career in CM subject.<sup>10</sup> Similar result found by study conducted in Uttar Pradesh.<sup>11</sup>

When a student joins medical school, they have already lived for around 20 years. How much exposure after four years Change this imprint while in medical school. Deficient Medical students do enter the school with the best of intentions to help people and such. However, many of them lose their initial zest for community involvement throughout the course of their education. As a result, the topic of CM becomes boring and unpleasant. This apathy is also exacerbated by the senior students' attitudes and behaviors. Study reported that many medical students who took the community-based rural health course reported changing their minds about wanting to practice in rural areas after intervention.

Study found some positive aspect of CM subject such as research and about family medicine. Study conducted in Agra found some positive aspects like good branch, prevention is better than cure, one can help the large group of people.<sup>8</sup>

India's health systems are battling challenges such a heavy disease burden, rising health care expenditures, a lack of human resources and their unequal distribution, imbalances in the skill mix, etc. adequate and effective health Workforce is needed to achieve accessible and equitable provision of healthcare. <sup>14</sup> Specialists in CM are needed who can identify the factors that affect health and take those factors into consideration when formulating promotion, prevention, treatment, and rehabilitation plans. <sup>8</sup>

## **CONCLUSION**

Lack of money and fame, no clinical exposure field work seems to be most important reason for rejection of CM as a career option. As expressed by students, negative attitudes and attributions have the potential to worsen health disparities, hinder the expansion of CM initiatives, and impede professional development if left unaddressed. Further work on how to incorporate CM training is needed. The faculty can make a significant influence in creating the right attitude towards the subject. Community based training program increases subject knowledge and plays a role in molding attitudes of students toward the care of people in rural areas. There is need of clinical exposure and awareness regarding future scope of subjects among students.

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