



Original Research Article

Learner's perceptions on teaching curriculum in community medicine

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ABSTRACT

Background: Poor learning attitude of undergraduate students makes them less confident in applying public health principles later in life as a professional. To address this problem, perceptions of the learners, at the receiving end of the curriculum, were taken to improve current teaching curriculum in community medicine.

Objectives: To identify the perceptions and expectations of learners towards Community Medicine curriculum and to compare these with the existing curriculum.

Materials and Methods: A cross sectional study was conducted by administering self-filled semi-structured questionnaire to the third MBBS phase I students. Majority of the questions were open ended to elicit students' responses in their own words. Performa contained questions like preferred method of teaching various topics, reasons for preferring particular method, desired changes in curriculum and examination pattern etc.

Results: One third of the students (33.6%) reported they were not satisfied with current teaching methodology. Least interesting method of teaching reported by students was lecture (51.5%). Reasons were- less interesting, no interaction with students, long monotonous presentations etc. One fourth of the students (25.74%) wanted more interactive methods of teaching in the form of group discussions, role play etc. Changes needed in curriculum were- modification in timing of teaching biostatistics and internal examination (from second to third year), inclusion of MCQs in lectures and examinations, more frequent examinations in third, revision classes after syllabus completion etc.

Conclusion: Satisfaction of the students is poor with current teaching pattern and they expect more interactive methods of teaching along with increased faculty-student interaction.

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1. Introduction

Community Medicine is a subject that is taught to undergraduate medical students during different phases i.e. starting from first MBBS and lasting till the end of Third MBBS part I. This subject makes student sensitized towards different levels of health care system of our country. As per the competency based undergraduate curriculum, an Indian Medical Graduate should be competent enough to have

holistic vision of medicine, including preventive, promotive and curative care for common diseases.¹ This highlights the significance of subject Community Medicine.

It is observed that undergraduate medical students perceive teaching in Community Medicine not so appealing which makes the students averse from learning the subject. Studies conducted in India have shown that majority of students find Community Medicine as lengthy subject which does not interest them much. Majority of the students prefer clinical subjects over Community Medicine and traditional teaching methods alone have not been successful in arousing

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students' interest as per their opinion.²

Such poor learning attitude make the students less confident in applying public health in real professional life when they start their career. To make students learn Community Medicine effectively, it is imperative to consider suggestions of the concerned chief stakeholders i.e. learners themselves.^{3,4}

With this background this study was undertaken to identify perceptions of the learners about Community Medicine curriculum to identify the gaps in current curriculum and to modify it duly as per the identified gaps. A well-implemented curriculum is received positively by students and is more likely to facilitate learning.

2. Objectives

1. To identify perceptions and expectations of learners towards Community Medicine curriculum
2. To compare the perceptions of students with the existing curriculum to identify gaps in teaching pattern.

3. Materials and Methods

3.1. Study setting

It was conducted at Medical College located in Valsad, Gujarat

3.2. Study design

This was a Cross sectional study

3.3. Study period

From April 2018 to August 2018

3.4. Sampling and study population

Undergraduate medical students studying in Third MBBS Phase I were approached to participate in the study. Out of 139 students, 122 participated in the study. (non-response rate 12%)

3.5. Study tool

The self-administered, semi-structured Performa was prepared for obtaining learner's perceptions and was validated by senior experienced faculties from Community Medicine department. It contained open-ended questions to elicit students' responses in their own words.

3.6. Data collection

The third year MBBS Part I students were informed the purpose of the research and sensitized to provide their valuable feedback. They were also informed about their completely voluntary participation in the study and the confidentiality of their responses. Informed verbal consent

was obtained from each study participant. Two contacts were made with students to cover those who were absent on the first contact of data collection.

3.7. Data management

The quantitative data was entered and analyzed using Microsoft office Excel 2016. The qualitative responses were noted down and major domains of interest were identified from the responses of students. Percentage of the responses was calculated and N in result section indicates total number of responses for each question as some students left few questions blank.

3.8. Ethical considerations

The study was initiated after clearance from Institutional Human Ethics Committee. (Letter No. MCV/IHEC/2018/15 dated 2018 Apr 27)

4. Results

Total 122 students studying in Third MBBS Phase I participated in this study with equal representation from both genders.

One third of the students (33.6%) reported dissatisfaction with current teaching methodology. The students reported lecture as the least interesting method of teaching (51.5%, n=99).

Figure 1 describes reasons for perceiving the different teaching learning methods as least interesting by the students. It's evident that in whichever teaching learning method, students are not actively involved and lose concentration, leading to less effective learning. Some students found field visits and role play as time consuming.

When asked if they desire any changes in current teaching pattern, one forth responded about no change needed. The exact modifications in current teaching method suggested by the students are described in Table 1.

The suggestions were in line with earlier responses in which they were asked least interesting teaching learning methods. Accordingly, students desired for more interactive methods of learning (25.74%), change in teaching pattern with emphasis on future application of this subject in academics such as entrance test for post-graduation (18.81%) and more practical or application of topic in clinical or community setting (8.92%).

Table 2 describes the changes suggested by students in current assessment system in community medicine. The students need examinations at frequent intervals (formative assessment) and they want choices in theory question papers.

| | |
|---------------------------|--|
| Lectures | <ul style="list-style-type: none"> •Boring, no concentration throughout the lecture, sleep inducing •Less interactive, Less attention on individual student •Long power-point presentations without understanding •Not audible |
| Presentations by students | <ul style="list-style-type: none"> •Boring, not effective •Makes presenter conscious •Students cannot teach like professors •Other students are not actively involved |
| Field visits | <ul style="list-style-type: none"> •Time consuming |
| Role plays | <ul style="list-style-type: none"> •Time consuming •Limited information is gained in given time •Few people are involved actively •All groups are busy preparing drama so less attention to other groups' performance |
| Tutorials | <ul style="list-style-type: none"> •Boring |

Figure 1: Reasons for perceiving the teaching method as least interesting (N=99)

Table 1: Changes desired by students in teaching pattern (N=101)*

| Changes | Frequency |
|--|-------------|
| No change | 26 (25.74%) |
| More interactive (addition of seminars, role plays, group discussions), Communicate with students during lectures | 26 (25.74%) |
| Change in teaching methodology and pattern | 19 (18.81%) |
| <ul style="list-style-type: none"> • Biostatistics: teach biostatistics in interesting manner and in groups, teach it in III MBBS as it is difficult to understand even after being taught 2-3 times • Give break in Clinical Posting • Make lectures more interesting: <ol style="list-style-type: none"> Post-graduation entrance examination-based teaching e.g. lectures followed by MCQs, Better power-point presentations, Teaching in local language | 15 (14.85%) |
| Add unit tests, spotting practical examinations | 9 (8.92%) |
| More practical / application based teaching | 3 (2.97%) |
| Revision sessions after syllabus completion | 2 (1.98%) |
| More topics to be covered in Clinical Posting- Total duration of posting should be more | 1 (0.99%) |
| No journals or journal correction without viva questions on the topic | 1 (0.99%) |

MCQs- Multiple Choice Questions
Multiple responses possible

Table 2: Changes desired by students in examination pattern (N=124)*

| Changes | Frequency |
|--|-------------|
| No change | 34 (27.42%) |
| Increase frequency of examination (more unit tests, spot examinations, viva in term end exam) | 28 (22.58%) |
| Modify internal examination timings: | 24 (19.35%) |
| <ul style="list-style-type: none"> • First internal exam in III MBBS, • Internal exam to be taken twice (one in second year and one in third year) | |
| Include MCQs in theory examination, avoid one-mark short answer questions | 15 (12.1%) |
| Choices of questions should be given in theory examination | 9 (7.26%) |
| Modify long answer questions | 6 (4.84%) |
| Case based examination pattern | 4 (3.22%) |
| Increase time duration of examination | 4 (3.22%) |

MCQs- Multiple Choice Questions
Multiple responses possible

4.1. Based on the responses the chief gaps identified were as follows

1. Less interactive methods in teaching curriculum
2. Biostatistics taught in second year MBBS- to be taught in third year MBBS or taught twice in both years as students find it difficult to concentrate during second year when their priorities are second year subjects.
3. No unit test or spots exam
4. Not enough revision schedules planned after syllabus completion
5. Less practical or application based teaching in current curriculum

5. Discussion

Total 122 students of third M.B.B.S. part- I expressed their views about teaching curriculum in Community Medicine. 65.4% of the students were satisfied with current curriculum which is higher than as reported by Sharma et al. where 41% of the students found the current curriculum practices very effective and no changes were required.

62(61.39%) students felt that the sequencing of topics was logical, however in spite of this 62(61.39%) participants felt that the lectures were lengthy and perceived not stimulating enough.⁵ Similar finding was observed by Bariya et al.⁶ and it's in line with our study finding. The students suggested to improve the lecture delivery by orienting the topics towards competitive examinations and also teaching in local language.

In a study focusing on non-classroom teaching, 42.3% students viewed the present teaching approach not so good, they preferred small group teaching methods and field visits. These methods help them to understand the topic easily and facilitate their active participation. Half of the students

requested to allot more time to small group classes and quarter of them wanted to allocate more time to field activities.⁷

A study by Gopalakrishnan and Ganesh Kumar suggested self-directed learning modules and problem-based learning, seminars, group discussion methods to be included in greater proportion in curriculum.⁸

Mandal et al. studied the opinion of 210 participants and found that 59% students were not satisfied with the syllabus. The students wanted to exclude environmental sanitation and to include health-care delivery system. Tutorial and family study learning were favored by majority of the students.⁹ 81.6% students preferred blackboard in another study as it stimulate interest and flow of thought is better.¹⁰

Almost all the students stressed that more practical topics should be covered and teaching methodology needs to be modified to make topic more interesting in study by Sadawarte et al.¹¹ Students in our study opined in a similar way. In another study more practical assignments were preferred by 57.8% of the students and quarter of the students felt that teaching faculties need to improve their teaching skill to make the teaching more interesting.¹²

Community medicine can be best taught in field demonstration and field work assessment is the best way to evaluate students. Field trips were perceived interesting and learning experience.^{3,12,13} Field visits contribute much to the practical skills and knowledge. There should be a blend of classroom and non-classroom teaching.⁷

Integrated teaching classes with horizontal and vertical integration for common diseases and health conditions impart better knowledge and skills related to primary health-care practice and family medicine.^{3,13}

Students mentioned that Biostatistics and Epidemiology should be taught by its practical application in clinical settings. Students suggested to these topics in third year and interactive classes instead of power point and seminars, more practical classes can be added, more of images and videos should be included, more of practical knowledge and association of practical knowledge with theory.⁷ The students in our study perceived also biostatistics as tough to understand and suggested to teach it in clinical posting using different approach.

Gopalakrishnan et al. suggested different approaches to internal assessment like assignments, projects, presentations and formative assessment compared to summative assessment. They also highlighted importance of Modified Essay Questions and Short Answer Questions in theory examination.¹⁴ The students in our study opined that frequency of the internal examinations should be increased and more time should be allotted to attempt the theory questions which should be of modified long answer question preferably.

In a study by Navinan et al. 58.7% students perceived lectures not interesting 83% enjoyed working in a group and 67.9% enjoyed small group discussions in first year, while in

final year curriculum, 60% perceived lectures interesting.⁴

The primary mode of teaching in community medicine need to move towards problem-based learning, exercises, case studies, field visits from lectures as primary mode. The assessments must be more objective and should focus on skill building, psychomotor skills, communication skills, critical thinking and team work.^{14,15}

6. Conclusion

Learners are not entirely satisfied with traditional teaching pattern and they desire more interactive teaching learning methods in curriculum. This is addressed well by introduction of competency-based curriculum in medical education. Proper implementation of the current guidelines will fill up these gaps in community medicine curriculum.

7. Source of Funding

None.

8. Conflict of Interest

None.

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