Research Article

Student’s preferences for learning in medical education

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ABSTRACT

Background: The mission of medical education is to provide the medical students adequate learning experiences so that they become competent doctors. In most of the medical schools of India, it is mainly taught by means of didactic lectures, tutorials and practical classes with often least interdisciplinary interaction. Objective: The objective of the present study was to explore the student’s preferences about teaching methods.

Methods: A cross sectional study was conducted during the period of July to November 2014 amongst 2nd year undergraduate medical students attending community medicine subject classes. Out of total 150 students, 138 were participated in the study. A pre-designed self-reported questionnaire was used as a tool for data collection. All opinions were rated using a five-point Likert scale, which ranges from “strongly preferred” to “strongly not prefer.” Data was entered in MS Excel and were analysed in the form of percentage and proportions whenever appropriate.

Results: In this study, mean age of the students was 19.38 ± SD 0.69 years. Out of 138 students, 81(58.7%) were females and 57(41.3%) were males. Ninety nine (71.74%) students agreed that the length of MBBS curriculum should be 4.5 years. The most preferred mode for theory and practical teaching by students was focused group discussion and bedside clinic respectively. The most common obstacle faced by students during theory and practical learning was one way, non-interactive teaching.

Conclusions: The students are interested in more interactive learning sessions. Students felt that the understanding is better with focused group discussion and bedside clinics.

Keywords: Learning methods, Medical education, Student’s preference

INTRODUCTION

Learning is an active process in which the student and teacher have to work mutually to make the knowledge-sharing process enjoyable and easier for comprehension.1 The mission of medical education is to provide adequate learning experiences to medical students so that they become competent doctors. The 4 ½ years medical curriculum to the students, comprises of 9 semester of 6 month each, two semester as 1st MBBS, 3 semester for 2nd MBBS, and 2 semester each for part 1 and part 2 of 3rd MBBS curriculum.

The various means of education are didactic lectures, tutorials and practical classes with often least interdisciplinary interaction. The emerging trend all over the world is to have a problem-based, integrated student-centered medical curriculum, demanding active participation from the students and facilitating self-directed learning. It is well known that no system could be fool proof in its application; it must be modified and applied to suit the needs of students in a particular infrastructure.1 Hence the present study was carried out with the objective to explore student’s preferences about teaching methods.
METHODS

A cross sectional study was carried out during the period of July to November 2014 amongst second year undergraduate medical students attending community medicine (PSM) subject classes in Government Medical College, Latur, Maharashtra, India. Out of 150 students, 138 were participated in the study. Informed consent was taken from the participated students. A pre-designed self-reported questionnaire was used as a tool for data collection. The data was collected by maintaining anonytny of students. All opinions were rated using a five-point Likert scale, which ranges from “strongly preferred” to “strongly not prefer.” The participation to study was on voluntary basis. All participants were given a briefing about objective of the study and assured confidentiality in collection of personal data. Institutional ethical committee approval was obtained for the study. Data was entered in MS Excel and were analyzed in the form of percentage and proportions whenever appropriate.

RESULTS

In the present study, the mean age of the students was 19.38 ± SD 0.69 years. Out of 138 students, 81 (58.7%) were females and 57 (41.3%) were males. Ninety nine (71.74%) students agreed that the length of MBBS curriculum should be 4.5 years.

The most preferred mode for theory teaching was focused group discussion. Problem based learning and lecture cum demonstrations were the other common modes preferred by the students (Figure 1).

Majority of the students preferred bedside clinics for practical classes. Mannequins and demonstrations were the next preferred modes (Figure 2). Seventy five (54.35%) students preferred chalk and talk presentation by teachers while 89 (64.49%) preferred power point presentation by teachers.

| Obstacles                                      | Number | Percentage |
|-----------------------------------------------|--------|------------|
| Time                                           | 10     | 7.25       |
| Voice                                          | 39     | 28.26      |
| Non interactive                               | 49     | 35.51      |
| Speed of teaching/syllabus completion          | 31     | 22.46      |
| Language barrier                              | 18     | 13.04      |
| Discomfort                                    | 04     | 2.90       |
| Student teacher ratio                         | 08     | 5.80       |
| No problem                                    | 11     | 7.97       |
| Mobile phone                                  | 02     | 1.45       |

| Obstacles                                      | Number | Percentage |
|-----------------------------------------------|--------|------------|
| Time                                           | 25     | 18.12      |
| Voice                                          | 22     | 15.94      |
| Non interactive                               | 35     | 25.36      |
| Speed of teaching/syllabus completion          | 26     | 18.84      |
| Language barrier                              | 12     | 08.70      |
| Discomfort                                    | 07     | 05.07      |
| Student teacher ratio                         | 12     | 08.70      |
| No problem                                    | 17     | 12.32      |
| Mobile phone                                  | 03     | 02.17      |

Figure 1: Preferences for theory teaching methods students (n=138).

Figure 2: Preferences for practical teaching methods students (n=138).

The most common obstacle faced by students during theory and practical learning was one way, non-interactive teaching. Other obstacles stated by students were that of the speed of lectures is too fast with the intention of completing the syllabus. Non audibility is also a significant hurdle noted by the students (As shown in Table 1 and 2).
DISCUSSION

The study identified some of the areas of current teaching which can be improvised for effective teaching. Our study had a slightly higher representation of females (58.7%) as compared to males (41.3%) which was similar to the study conducted by Papanna KM et al.\(^1\) and Adib-Hajbaghery M et al.\(^2\)

Our study also found that an overwhelming majority of the students preferred focused group discussion, problem based learning and demonstrations for theory classes. For practical classes bedside clinics and mannequins were more preferred. Focused group discussion and problem based learning forces students to be alert. It also allows the students to contribute their views and ask questions. Thus it facilitates active participation and promotes learning by Adib-Hajbaghery M et al.\(^3\) and Carpenter JM in South Carolina.\(^4\)

The traditional chalk and talk method and power point presentations were almost equally preferred thought mix of aids were the most preferred. Mohan L et al.\(^5\) and Giri PA et al.\(^6\) also had similar findings in their studies while these findings were different from the findings of the study conducted by Papanna KM et al.\(^1\) which found that chalk and talk method was more preferred. Whereas, the study conducted by Atif M et al.\(^7\) also found that PPT was the most preferred aid with white board being the least favorite.

As expected, majority of students preferred bedside teaching. Clinical and communication skills, correlation are better developed in bedside teaching in addition to learning the bedside procedures. Students also preferred for mannequins during clinics as it increases their confidence; helps to gain more practical experience and practicing those skills.

One way teaching was the most common obstacle faced by the students. Other common obstacles were speed of teaching to complete the syllabus and lectures not being audible. Language barrier was also faced by some students. The SPICES model (Student centered, problem based, integrated, community based, elective and systematic) is an innovative model which emphasizes on communication skills, doctor patient relationship, interpersonal and team communication and community oriented education rightly fits to the need of the students.

CONCLUSION

The students are interested in more interactive learning sessions. Students felt that the understanding is better with focused group discussion and bedside clinics.

Recommendations

The SPICES model (Student centered, problem based, integrated, community based, elective and systematic) should be strongly implemented in medical teaching.

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