Perception on lecture class in Community Medicine among MBBS students of West Bengal in India

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Abstract:

Back ground: Lecture is an important, accepted and well used method of sharing and providing information in a group of students in a specified time and place in an organized manner. Defect in this method may affect adversely both the knowledge provider and accepter. Therefore a continuous search is an essential need for improvement of lecture classes that is the impetus of our study.

Objectives: i) To study the perception of MBBS students about lecture class in Community Medicine and ii) to recommend measures for improvement of those classes.

Method: A cross-sectional descriptive study was undertaken among 4th and 7th semester MBBS students of Burdwan Medical College in West Bengal, India using pretested self-administered questionnaire.

Results: 4th semester students opined to have significantly more number of lecture classes (p=.024). They preferred pre-lunch session for lecture more (p=.022) than 7th semester students and more number of students in lecture class (p=.016). 7th semester students realized the necessity of lecture class significantly (p=0.002) more and mentioned about lack of summarization at the end (p=0.000).

Conclusion: It is revealed from the study that there are a number of lacunae in organization of lecture classes and also in the way the classes are taken. The findings will help the teachers to use this method more effectively for betterment of students.

Key words: Lecture class, Community Medicine, MBBS Students.

Introduction:

Communication can be regarded as a two-way process of exchanging or shaping ideas, feelings and information. Communication and education are interwoven. Communication strategies can enhance learning[1]. Lecture is one of the group approaches of communication. A lecture may be defined as carefully prepared oral presentation of facts, organized thoughts and

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ideas by a qualified person[1]. Lecture is an age old and well accepted method in teaching and learning process. Medical Council of India has also adopted that as a method of teaching for MBBS students. Therefore a medical teacher should be careful while using this method. During a lecture, both the visual and auditory senses are used to absorb information and here assistance in the form of a visual aid is useful[2]. Commonly used visual aids are chalk-board, overhead projector and LCD projector.

There is always a scope to improve teaching to make it more effective. Anyone who genuinely wishes to teach better should therefore seek his students' opinion[3].Research indicates that students are the most qualified sources to report on the extent to which the learning experience was productive, informative, satisfying, or worthwhile[4]. A continuous search is essential to improve the lecture method for the sake of education from this qualified source i.e. students. For that reason this present student was undertaken with the objectives to study the perception of MBBS students about lecture class in Community Medicine and to recommend measures for improvement of those classes.

Materials and methods:

A cross-sectional descriptive study was conducted among undergraduate Medical Students of 4th semester (2009-2010 batch) and 7th semester (2008-2009 batch) group of Burdwan Medical College, West Bengal, India during June-July 2011 as they were available in Community Medicine lecture classes at the time of data collection. The data were collected from students on a specific date and time in the Community Medicine lecture

class. Out of 186 enrolled students of two batches, 150 students had attended the respective class and participated in the study. Data collection was done using a pretested and predesigned self-administered questionnaire after obtaining informed verbal consent from the students. Permission of this study was obtained from the Principal of the college and Head of the Department of community medicine. At first the purpose of the study was explained to the students followed by instructions to read and fill up the questionnaire carefully, individually and independently. Data were collected maintaining anonymity to get unbiased opinion from the students.

Statistics: Data were entered in MS excel sheet, checked carefully and analyzed using proportion, Chi-square test, Fisher's exact test and unpaired t test with the help of SPSS software version 19.0.

Results:

The mean age of the students was 20.95 years ± 1.13, the range being 19-27 years. Majority of them were in 21-24 years age group. Most of students were male (70.0%). Difference between mean age in male and female was not statistically significant (p=0.987).Most of them were from English medium schools (48.0%) followed by Bengali medium (42.0%).

Majority of the students preferred to have two lecture classes per day (44.6%). Opinion of number of classes two versus three between 4th and 7th semester students respectively varied significantly (p=0.024). Timing of lecture classes had accepted by most (68.7%) at 10-am to12noon. More students of 4th semester had such opinion than that of 7th semester, the difference being statistically significant (p=0.022). Most of the students (51.3%) preferred to have 45

minutes as duration of lecture class ,while 4th semester students preferred 60 minutes over 45minutes of 7th semester but the difference was not statistically significant. Majority of the students wanted that number of their classmates would be >50 in the class. However majority of 4th semester students allowed more students in class as compared to 7th semester students , the difference being statistically significant(p=.016) Almost equal proportion of students preferred English and mixed(English and vernacular) language as medium of teaching. LCD projector was most preferred (62%) audio-visual aid over others while Overhead Projector was least one (13.3%).

Majority of the students (94.7%) had admitted the need of lecture class and such need is significantly (Fisher exact two-tailed p=0.002) more in 7th semester than 4th semester. Majority of the students in both groups admitted that examples were cited (64.7%), note writing (60.7%) was possible and queries were addressed (56.7%) but explanations were lacking (52.0%) in class. Majority of students in both groups (81.3%) mentioned that the important points were stressed in lecture classes. Most of the students mentioned that summarization of lecture at the end of class was not done (65.3%) and this was significantly (p=0.000) more with 7th semester (79.8%) than with 4th semester (49.3%).

Discussion:

MCI accepted lecture class is an important tool in undergraduate medical education. So, that should be appropriately used and organized according to the students' needs. The present study was attempted to assess the perception of the students on lecture class with an idea to improve it. This study was done among the students of community medicine because they are exposed to the lecture classes for longer time from 1st semester to the 7th semester and can give their opinion in better and experienced way. 4th semester students expressed preference of two lecture classes per day over 7th semester's three classes per day indicating older student's interest and dependence on lecture for better learning and understanding of the topic. Both the groups wanted pre-lunch session for lecture class instead of morning and post-lunch session. Probably this is from the idea that they could give more concentration in that session. Majority of students from both groups opined that duration of class should be more than 30 minutes. Indicating adult mature mind want to spend more time with the lecture for better and proper utilization of time. R Kulkarni et al found that 72.6% students preferred 45 minute duration for lecture class[5] which is similar to this present study. Most of 4th semester students had no objection to have 76-100 students in class while 7th semester students preferred to have lesser number of students. In a study at Haryana students suggested that they should be divided into smaller batches for their lecture classes also, as done for the tutorials and group discussions and if possible duration of the lectures should be cut short[6]. This finding does not corroborate with the findings of our present study. The reason for this may be several like a-v aid use, lecture class room, control over the students, personal ability of the teacher.
About half of the students wanted English and mixed language as medium of teaching in both 4th and 7th semester groups. Both student groups preferred LCD projector as a-v aid which is similar to Power point presentation preference in Bangalore study [5] but was proportionately less than our present study finding indicating more and more acceptability towards the LCD projector as time is advancing. A study in Rajasthan showed 54% of students relied on Blackboard as compared to overhead projector[7],in contrast the present study showed only 24.7%.In a study by U Dhaliwal at Delhi overhead projector was found to be the best in 89.3% students[8] but this

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study observed very low preferability (24.7%). This further strengthens the LCD acceptability. All most all students (94.7%) mentioned about necessity of lecture classes of which 7th semester students unanimously. This strengthens the MCI decision on reliability on lecture. This is supported by a study at Bangalore where 81.9% medical students thought that lecture classes are essential[5]. In a study at Medical College, Kolkata, West Bengal 76% students opined that their queries were addressed in lecture class and 66.6% mentioned regarding summarization[9] at the end of class but in our present study it is only 56.7% and 34.7% respectively in two batches which is quite less.

In this present study students opined that lecture class in community medicine is an important tool in teaching learning process, classes should be at pre-lunch session, students may be >75 per class, number of class would be 2 or 3, duration of class should be >45mins, LCD projector is the preferable audio-visual aid and medium of language may be English or mixed. Regarding quality of lecture - explanation, example citation and note writing feasibility was not satisfactory. Summarization of the lecture class was not regularly done, though teachers stressed on important points.

Students are the best judge of their teachers and in this present study they have given their verdict freely and expressed their views independently. This will help the teachers to identify their lacunae for improvement in their teaching learning process and make them capable to deliver lecture more intelligently according to the need of the knowledge seeker students.

Therefore the findings of the present study will help in better organization of lecture classes and to make them more effective as per the students' needs. Such assessment of students' perception should continue periodically and inter institution basis for betterment of medical education system throughout India. These students are the future doctors and doctors are the single community to render services to mankind that's why the teaching process should be improved.

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Table 1: Distribution of students according to age, sex and past medium of education.(n=150)

Characteristics	Number	Percentage
Age(in years):		
17-20	54	36.0
21-24	95	63.3
25-19	1	0.7
Sex:		
Male	105	70.0
Female	45	30.0
Past medium of education:		
English	72	48.0
Bengali	63	42.0
Mixed	13	8.7
Hindi	2	1.3

Table2: Distribution of students according to suggestions for organization of lecture classes.

(n=150)

Feature	4th Semester No. (%)	7th Semester No. (%)	Total No. (%)	χ^2, d.f.	p value
Number of class/day:					
1	4(5.6)	8(10.1)	12(8.0)	9.398,	0.024
2	41(57.7)	26(32.9)	67(44.6)	3	
3	21(29.5)	37(46.8)	58(38.7)		
≥4	5(7.2)	8(10.1)	13(8.7)		
Timing of class:					

	4th Sem	7th Sem	Total	χ², d.f.	p value
8am-10am	7(9.8)	9(11.4)	16(10.7)	9.637	0.022
10am-12noon	56(78.8)	47(59.4)	103(68.7)	3	
12noon-2pm	5(7.0)	20(25.3)	25(16.7)		
2pm-4pm	3(4.4)	3(3.9)	6(3.9)		
Duration of class(minutes):					
30	6(8.4)	1(1.3)	7(4.7)	5.355	0.069
45	32(45.1)	45(57.0)	77(51.3)	2	
60	33(46.5)	33(41.7)	66(44.0)		
No. of students:					
≤25	6(8.4)	6(7.6)	12(8.0)	10.365	0.016
26-50	20(28.2)	22(27.8)	42(28.0)	3	
51-75	19(26.8)	38(48.1)	57(38.0)		
≥76	26(36.6)	13(16.4)	39(26.0)		
Medium of teaching:					
English	36(50.7)	36(45.6)	72(48.0)	0.885	0.642
Bengali	3(4.2)	2(2.5)	5(3.3)	2	
Mixed	32(45.1)	41(51.9)	73(48.7)		
Use of A-V aid:					
Chalk-board	12(16.9)	25(31.6)	37(24.7)	4.45	0.108
OHP	11(15.5)	9(11.4)	20(13.3)	2	
LCD	48(67.6)	45(57.0)	93(62.0)		

Table 3: Distribution of students according to their opinion about various aspects of lecture class.

(n=150)

Aspect		4th Semester	7th Semester	Total	χ², d.f.	p value
		No.(%)	No.(%)	No.(%)		
Necessity	Yes	63(88.7)	79(100.0)	142(94.7)		(Fisher
	No	8(11.3)	0(0.00)	8(5.3)		Exact

						2 tailed) 0.002
Explanation in class	Yes	35(49.3)	37(46.8)	72(48.0)	0.091	0.763
	No	36(50.7)	42(53.2)	78(52.0)	1	
Example citation	Yes	50(70.4)	47(59.4)	97(64.7)	1.995	0.162
	No	21(29.6)	32(40.6)	53(35.3)	1	
Note writing possible	Yes	46(64.8)	45(57.0)	91(60.7)	0.960	0.327
	No	25(35.2)	34(43.0)	59(39.3)	1	
Stress on important points	Yes	58(81.7)	64(81.0)	122(81.3)	0.011	0.915
	No	13(18.3)	15(19.0)	28(18.7)	1	
Addressing of queries	Yes	37(52.1)	48(60.7)	85(56.7)	1.139	0.286
	No	34(47.9)	31(39.3)	65(43.3)	1	
Summarization at end	Yes	36(50.7)	16(20.2)	52(34.7)	15.309	0.000
	No	35(49.3)	63(79.8)	98(65.3)	1	

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