

Importance of Talk and Chalk Method of Teaching: Dental Students' view in Preclinical Years

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Abstract

Introduction: New teaching techniques are emerging with increasing use of computer and advancement of technology. There is a dilemma in the minds of senior teachers whether to totally abandon traditional method of "talk and chalk" and use power point method for lecture delivery. It is important to know the students' perception regarding their preference of the teaching method to help them to learn and score better.

Methods: The opinion of first year dental students was sought in the classroom after one month of teaching physiology by different teachers using talk and chalk or power point method. A pretested questionnaire was used to collect the opinion of 400 students over the period of 8 years.

Results: Majority (95%) students preferred the lecture by conventional "Talk and chalk" method over the power point presentation. About 15% were of the opinion that the teaching should be by conventional lecture by "talk and chalk" but diagrams should be shown by power point slides.

Conclusion: The present study shows that for effective learning and teaching the conventional method of talk and chalk lectures should be combined wherever necessary with newer techniques like power point presentations.

Keywords: Dental students, Dentistry, Power point, Teaching methods, Talk and chalk

Introduction

This is the era when a lot of new teaching aids and techniques have emerged for example, overhead transparencies, power-point presentation etc. to take didactic lectures. Most of the students are now exposed to these new techniques. Few teachers adhere to the old method of teaching that is 'Talk and Chalk' - where the teacher delivers the lecture by talking and explaining on the board with a chalk. The conventional black board is now replaced by a white board where chalk is replaced by marker pens.

Many researchers recommend power point presentation as a method of taking undergraduate lectures.¹ Some have

emphasized the importance of traditional Talk and chalk method.^{2,3} So the question arises as to which method is better -the traditional Talk and chalk or the newer methods of teaching.

The authors of this paper, being teachers for more than three decades, have been teaching medical and dental students in India using both these methods of teaching over the years. But somehow being a student as well as a teacher in this era of different ways of teaching, we have always felt the importance of a good Talk and chalk lecture. To the best of our knowledge little data in literature on healthcare education is available on this issue, hence we decided to take up this study.⁴⁻⁶

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Materials and Methods

This study was (8 years, 2009-2017) done in a dental college in Delhi, India. In this college, a new batch of fifty students join the first year of Bachelor of Dentistry (BDS) course every year. In the first year, which is a pre-clinical teaching year, the students have to study subjects like Anatomy, Physiology, Biochemistry and Dental anatomy and histology. Different methods (Talk and chalk, power-point presentation) are used in different subjects so the students have exposure to both methods. Physiology is also taught by different teachers by these two methods.

A questionnaire was developed by the first author to know the students view point on the different teaching methods i.e. which method of teaching they preferred and why for different subjects especially Physiology. This was pilot tested on 10 students and revised. All the batches of first year dental students over eight years (from 2009 to 2017) were asked the questions using the pretested questionnaire and their verbal responses were recorded by the teacher teaching physiology. Data of responses from these 400 students is presented here.

Results

Out of 400 students, 380 (95%) said they preferred the lecture by conventional “Talk and chalk” method over the power point presentation. The reasons given for their preference are shown in the table 1.

from U.K. were sent to Shanghai to study the class-room methods of teaching. These teachers reported that teacher directed method of teaching should not be abandoned.²

The current study has also shown that first year dental students definitely prefer to be taught different subjects including physiology by “Talk and chalk method” and not by power point presentation. A point to be noted here is that these students join dental college just after school and were not exposed to power point method of teaching. The power point presentations are too fast for their liking. They want to take down notes during the lecture which they are not able to when slides are changed so fast. In order to copy down the matter from the slides they are unable to concentrate on the content and hence their concepts of the subject do not become clear.

We all know, the preclinical subjects especially Physiology are all about understanding concepts. Physiology being the basis of all medicine it becomes very essential to make the students understand the basic concepts. Hence, the method of teaching which serves this purpose should be adopted. As the students prefer the conventional “Talk and chalk” lectures, we should realize the importance of this method. This method should be used with of course the use of power point slides whenever required such as showing diagrams or conceptual figures. Meo SA and Meo SA et al. have further shown that the students taught by integrated method performed better.^{4,5}

Table 1. Summary of responses by the students

S. No.	Question	Response (No of students) (%)	No of students (%) Response: b
1.	Preferred the conventional lecture by “Talk and chalk”.	380 (95%)	20 (5%)
2.	Diagrams should be shown by drawing on board.	340 (85%)	60 (15%)
3.	Concepts become clearer by “Talk and Chalk”.	360 (90%)	40 (10%)
4.	Teachers take more time to explain the concept rather than changing the slides fast.	368 (92%)	32 (8%)
5.	Easier to take down notes when taught by “Talk and chalk” method because power point slides are changed very fast.	360 (90%)	40 (10%)
6.	Diagrams are easier to follow when drawn on board step by step.	280 (70%)	120 (30%)
7.	They connect better with the teacher during Talk and chalk lecture.	320 (80%)	80 (20%)
8.	Lectures should be taken by “chalk and talk”.	380 (95%)	Response b: 20 (5%) Response c: 60 (15%)

Only 20 (5%) preferred power point presentation over “chalk and talk”. About 15% (60) were of the opinion that the teaching should be by conventional lecture by “talk and chalk” but diagrams should be shown by power point slides.

Discussion

The preferred method of teaching has been a topic of debate amongst many teachers of medical and dental colleges. Looking at success of students from China in different international tests like PISA, TIMSS etc. 70 teachers

From our students’ point of view Talk and Chalk is the winner. Seth A et al.⁶ have compared perception of medical and dental students and found that dental students preferred the use of talk and chalk method. Although there is no evidence-based superiority of any lecture delivery method.⁶

The traditional method of teaching though more cumbersome for the teachers should not be done with, it is here to stay. Definitely there are some disadvantages and limitations of the conventional Talk and chalk method. It is

usually a one-way flow of information. The teacher does the talking and students are passive listeners. One-hour lecture might get boring for the students. This method of teaching is usually slower than the power point presentation. A good teacher can overcome these limitations by bringing about some innovations in the conventional lecture (table 2).

Table 2. Advantages and disadvantages of Chalk and talk method above other methods

S. No.	Chalk and Talk method	Other methods (Power point)
	Advantages	Disadvantages
1.	It is not dependent on electricity or any equipments. So power failure or failure of equipment can not ruin the lecture	Power failure ruins the lecture. Requires computer and projector which adds to the cost
2.	First year students more familiar with this traditional method so better acceptability	Students just come from school. Not very familiar
3.	Concepts become clearer by "Talk and Chalk" as teacher takes more time to explain	Teacher has tendency to change the slides fast and may not take time to explain
4.	Easier to take down notes when taught by "Talk and chalk" method because teacher goes slow	Power point slides are changed very fast and teacher discourages notes taking
5.	Diagrams are easier to follow when drawn on board step by step	Ready made diagram does not give enough time to the students to follow each step
6.	They connect better with the teacher during Talk and chalk lecture as eye contact is easier to maintain	Pace of lecture is fast and often teacher hidden behind the computer
7.	Two way flow of information easy as teacher can observe body language of the students and pace is slow	There is a one way flow of information. Often the teacher does the talking and students are passive listeners
	Disadvantages	Advantages
1.	Topic may not be covered fully as pace often slow	Planned content can be finished in time
2.	Diagrams to draw during the lecture take away lot of time	Ready made diagrams save time

3.	Lecture can be boring if not made interactive and teacher faces blackboard all the time	Teacher faces students most of the time
4.	Students may not able to concentrate if short breaks are not taken during the lecture	Easy to break monotony by using interesting pictures

Points to be kept in mind by the teacher are as follows:

- Teachers voice should be loud and clear
- Teacher should create a relaxed environment during the lecture and try to give a personal touch to the lecture sessions
- The first few minutes can be spent in finding out how their day has been, any difficulties they are facing in the subject or otherwise
- Eye contact with students during the lecture is of paramount importance
- Spellings should be emphasized upon as most of the medical words and terminologies are new for the fresh students and hence, they often mis-spell them. Moreover, some students may not be used to "English language" as the medium of instruction before joining the dental college
- Short breaks should be taken during a lecture. One may stop for some humour or ask questions. Continuous long lectures can get boring and students' interest in the lecture is lost
- It's not easy to concentrate well for more than 15- 20 minutes⁷
- Students should be encouraged to ask questions and clear doubts if any, during the lecture. It is a known fact that student - teacher interaction is extremely important in creating a learning environment.⁸ Interactive lectures are more interesting and result in better learning⁸⁻¹⁰
- Practical examples from day to day life should be given to explain various concepts. It makes the lecture more interesting and easier to understand
- Teacher should keep a plan and important points of the lecture handy to refer to, so that the lecture is more organized and no important point is missed
- The application of various concepts to different clinical conditions should be explained very well. This makes the students take more interest in the subject and helps them understand diseases better. This approach certainly helps make better doctors
- The last and most important point is to discuss good human values and medical ethics with the students every now and then. This goes a long way in producing doctors with a human touch
- One added advantage of Talk and chalk lecture is that it is not dependent on electricity or any equipment's. So, power failure or failure of equipment cannot ruin the lecture.

Conclusion

This study clearly shows that most first year BDS students prefer to be taught various subjects, especially physiology by the Talk and chalk method. A combination of this 'old method' of teaching and the newer techniques like power point presentations should be used for teaching. Newer techniques have their own usefulness but the dictum 'Old is gold' stands true for the Talk and Chalk lectures of yesteryears. This fulfills the students' expectations and their learning needs.

Conflict of Interest: None

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Appendix 1: Questionnaire

Which method of teaching do you prefer:

- Chalk & talk
- Power point presentation

Diagrams should be shown by:

- Drawing on board
- By slides

Your concepts become clearer by which method of teaching:

- Chalk & tal
- Power point presentation

Teachers spend more time explaining concepts by:

- Chalk & talk
- Power point presentation

It is easier to take down notes by:

- Chalk & talk
- Power point presentation

Diagrams are easier to follow:

- On board step by step
- Power point presentation

You connect better with teacher during which method of teaching

- Chalk & talk
- Power point presentation

How should the lectures be taken:

- Chalk & talk
- Power point presentation
- Chalk & talk but diagrams by slides