



A SURVEY STUDY OF CONVENTIONAL TEACHING WITH CHALK BOARDS, POWER POINT PRESENTATIONS, IMPARTUS TEACHING AND ONLINE TEACHING : A STUDENTS PERSPECTIVE

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ABSTRACT

The world is changing very fast, with daily feed in of informations and developments. Learning the fundamentals while keeping abreast with new knowledge is equally important. Here is an effort to assess various platforms of learning for BAMS students. The sudden outbreak of Covid-19 has challenged the systems of society and learning is not different from it. The aim of this study was to assess the best method for learning from students perspective. A survey study based on multiple choice questionnaire has been undertaken for 200 students of Ayurveda medical profession in a college located in central India to understand students perspective regarding Conventional Teaching with chalk boards, Power Point Presentations, Impartus Teaching and Online teaching. The response of the students were assessed on the basis of online questionnaire based Google form filled by the students. It was concluded that maximum students preferred conventional teaching along with power point teaching. Only Few students looked forward to impartus and online lectures. These may be attributed to the technical concerns.

KEYWORDS : Conventional, Teaching, Technology

INTRODUCTION:

Students are exposed to absolutely new arena as they enroll themselves in a professional Ayurveda course. The syllabus of Ayurveda comprises of classical Ayurveda literature written in Devnagiri along with the modern medical compendia. Teaching is something of an art. Teachers can teach and make students understand, recall and replicate well by using the best teaching help. Lectures have been the most common form of teaching and learning since ancient times.¹ It is expected that there would be a pragmatic change in medical education system in India, as a result of innovations in teaching-learning methodologies.² With the ever-changing world and the emergence of new technology, a number of other ways of teaching have arisen along with traditional teaching methods. Apart from conventional teaching, power point method of teaching is widely used in many Ayurveda colleges. Also, impartus- an innovative video enabled learning system is introduced in many institutions where by the lectures delivered are recorded within the given time frame.

The year 2020 comes with new challenges due to the outbreak of Covid-19 Pandemic. Teaching institute were closed due to implementation of countrywide lockdown. Online teaching with the help of zoom meetings and Google meet were undertaken to complete the syllabus of the students.

Earlier studies have been done comparing the traditional method and power point method of teaching only. Since our Ayurveda college has implemented all the above four forms of lecture delivery system and as learning process should be as free-flowing as possible and the methodology adopted should be conducive to learning. We initiated this survey study to assess the preference and perceptions of the students regarding the above four forms of teaching.

AIM:

This study aims to do a survey study regarding students perspective of conventional teaching with chalk boards,

power point presentation, impartus teaching and online teaching as the teaching techniques used for delivering lecture to the first and second year Ayurveda professional students. Also to analyze the best method which students prefer as teaching aid.

METHODOLOGY:

A multiple choice questionnaire based Google form link was made available anonymously to 200 students of first and second BAMS students. 198 out of 200 students submitted the form about their perception of the four teaching techniques. A critical analysis of the results was done to understand the preference and perception of students.

MATERIALS AND METHODS:

- 1.) Study design – cross sectional study
- 2.) Study population – 200 students of first and second BAMS. Datta Meghe Ayurvedic Medical College Hospital & Research centre Nagpur.
- 3.) Data collection method – A multiple choice questionnaire-based Google form link was made available to students and they were asked to fill and submit it within a span of a week.

RESULTS:

We conducted this survey in our recently established Ayurveda medical college and hospital located in central India. Out of the 200 undergraduate students who were provided with the electronic link to the questionnaire for recording their responses about various teaching methods 198 responded and further responses were closed after 7 days. The questionnaire included 22 questions with single best responses and all participants provided feedback on each question. Responses to some of the critical questions have been summarized below. Demographic data collected from the participants included age, educational status and their place of residence prior to enrollment in the medical college. As expected, they were all young adults aged less than 25 years. They were equally distributed amongst 1st and 2nd year BAMS course. We received responses from

students belonging to all socioeconomic background. More than 60 percent of the students belonged to a rural background but almost 95 percent individuals who submitted their responses had basic knowledge of computers and information technology.

Overall satisfaction and effectiveness of lecture was better with power point teaching method (49.7 %) followed by traditional chalk and board method (43.7 %). None of the participants found online teaching effective. Also, higher learning objective were attained with power point method (61.9 %).

Table 1- Response Of Students In Percentage

SNo	Question	Preferred Method n(%)			
		Chalk and Board Method	Power Point Method	Impartus Method	Online Teaching
1	Comfortable method to attend	85(42.9)	95(48)	16(8.1)	2(1)
2	Organization of lecture	56(28.3)	123(62.1)	17(8.6)	2(1)
3	Better terminologies & spellings	51(25.8)	128(64.6)	19(9.6)	0(0)
4	Lecture content clarity	77(38.9)	106(53.5)	14(7.1)	1(0.5)
5	Neatness of Diagrams	35(17.7)	153(77.3)	9(4.5)	1(0.5)
6	Visibility of Lecture Contents	36(18.2)	142(71.7)	19(9.6)	1(0.5)
7	Explanation of Concepts	115(58.4)	68(34.5)	14(7.1)	0(0)
8	Stimulate Interest in Topic	92(46.5)	91(46)	15(7.6)	0(0)
9	Text & Diagram Reproducibility	54(27.3)	135(68.2)	7(3.5)	2(1)
10	Take Notes and Diagrams	50(25.3)	135(68.2)	11(5.6)	2(1)
11	Integrate Text with Figure	44(22.3)	140(71.1)	11(5.6)	2(1)
12	Continuity of Lecture	76(36.9)	103(52)	21(10.6)	1(0.5)
13	Satisfaction & Effectiveness	86(43.7)	98(49.7)	13(6.6)	0(0)
14	Retention of Contents	77(39.3)	93(47.4)	20(10.2)	6(3.1)
15	Learning objectives Attained	55(27.9)	122(61.9)	19(9.6)	1(0.5)
16	Student teacher interaction	129(65.5)	60(30.5)	6(3)	2(1)
17	Doubts Explanation	116(58.9)	72(36.5)	7(3.6)	2(1)
18	Quoted Texts (shlokas) Explanation	113(57.4)	76(38.6)	7(3.6)	1(0.5)
19	Deviation from topic	58(29.2)	57(29.2)	15(7.7)	6533.3()
20	Natural Pauses	63(32.5)	70(36.1)	9(4.6)	52(26.8)
21	Time for self-study	66(33.7)	96(49)	24(12.2)	10(5.1)

With regards to ease of attendance, 48 percent preferred power point method, 42.9 percent were comfortable with chalk and board method. People preferring impartus and online teaching were 8.1 percent and 1 percent respectively. With power point method the contents of the lecture are more predictable since a larger proportion of it is already mentioned on slides even before elaborated by the teacher thus students have a fair clue about, the points which will be covered.

Most of the participants found their lectures more organized (62.1%) with better clarity of content (64.6 %) and understood terminologies (53.5%) nicely in power point method compared to other three methods. However, most of the undergraduates accepted that concepts and principles were meaningfully conveyed with chalk and board method (58.4%). A power point presentation is made by the presenter well in advance prior to the scheduled event after immense research on the study topic and thus it is expected to be more organized. Moreover, these presentations can be subjected to repeated self and 'peer group' based reviews to make it more focused and problem oriented.

Student teacher interaction was highest with chalk and board method followed by power point method (65.5 vs 30.5). Similarly, doubts regarding the study topic (58.9) and explanation for quoted texts 'shlokas' (57.4) in Ayurveda were strikingly higher with chalk and board method.

Students were able to take notes and diagrams easily, integrate text with figures and reported easy reproducibility of text and diagram with power point method. Participants found chalk with board as well as power point methods, equally good stimuli to generate interest in the topic (46.5% vs 45 %) and natural pauses but rate of distraction and deviation from topic were highest with online teaching method (33.3%).

DISCUSSION:

Teaching is an art of promoting and motivating learning character in students. A well-organized lecture remains one of the most productive ways of combining and presenting

various sources of information. Teaching methods have continuously evolved from traditional chalk and board method based didactic lectures through power point software-based presentation learning to the internet-based novel online real time teaching approach.

In our study, most of the students reported power point presentation method as the preferred medium of instructions for a majority of critical factors involved in learning such as lecture content, its organization, clarity, better terminologies and text-figure integration. Surprisingly, the students found better Content reproducibility including diagrams, making notes, continuity in teaching and even retention of contents which are considered to be the primary advantages of traditional chalk-board method. However, chalk-board method was rated best for student teacher interaction, clearing doubts and explaining quoted texts 'shlokas'.

In our survey, only a few undergraduate students considered impartus method and online lecture series. In fact, many of them even believe that it's likely to deviate from the topic during online learning using various e-platforms. Large proportion of our students come from rural and semi-urban background having only the basic knowledge about the computers and information technology. Thus, they might have found these methods less interactive, feeling of disconnect, hesitant to seek explanations leading to dissatisfaction. During e-learning, there is no method to assess whether the students are paying attention to lecture or the intended message is conveyed. In Impartus sessions, both the teachers as well as students are prone to 'Hawthorne' effect implying changes in behavior of an individual once he is aware of being observed. It is a remotely managed time constrained method where faculty members are likely to proceed at a higher pace in an attempt to cover subject in large details or miss upon few aspects of lesson plan. Also the primary aim of impartus lectures to provide recorded lectures to students absent due to various reasons doesn't seem fruitful since students preferred self study or explanation from peers over it. This may be due to technical errors faced by students while viewing the recorded lectures.

Teaching with chalk and board has been the primary medium of instructions of modern education. It is quick, easy and does not require any costly materials. The instructor can communicate his expertise and go through the subject in depth, rather than rely on the power points. This method also helps to improve student-teacher relationship as the method is used in one to one teacher student interaction.³ The sessions are highly interactive, natural pauses are frequent, thus allowing students to copy the diagrams that the instructor draws on the board or take notes to help them understand more about the subject which makes learning active. To draw exact and accurate diagram on black board with chalk is not easy for most of teachers and it can obviously be more time consuming. Legible handwriting, poor visibility and at times difficulty to transmit a few terms due to pronunciation or spelling problems are a few concerns to mention.^{4,5}

J Jayarani in her study in 2017 reported that 80% of the students found conventional chalk and board more interest stimulating and helpful for conceptual understanding than PowerPoint Presentation. It enhances the memorization and reproducibility of text and diagrams.⁶

Powerpoint method is innovative, attractive, requires teachers to have a well-set outline of the lecture. One can effectively explain the topic with images and videos. It gives flexibility to the teacher to concentrate on important concepts since the slides are usually self explanatory, saves time required to draw the diagrams. PPT encourages better organization and interpretation of the topics of the lecture, as the subject scope and flow are well defined in a finite number of slides. Students can use PPT as notes and hence can focus on the concept building instead of taking notes. These presentations are often a great resource which can be edited and updated regularly. But it makes learning more passive, less natural pauses, subject to power cut issues in third World countries. It reduces teacher student interaction to some extent, may introduce boredom.⁷

Nusrat Jabeen & Abdul Ghani conducted a survey-based study amongst 150 first year MBBS students comparing chalk-board and power point methodology. Most students (90.7%) favored PPT presentations, although only 9.3% favored the chalkboard approach lectures.⁸

Meo SA et al (2013) compared the effect of chalk-board and PowerPoint multimedia-based teaching by assessing the marks obtained in a multiple-choice question pattern examination. This study concluded that the combined teaching method (Power-Point and Chalk-board) was a more effective teaching and learning tool than PowerPoint or chalkboard alone.⁹

Higher education teachers are increasingly engaged in web-based teaching classes. Universities and colleges are using online courses to cope with greater enrollments and budget constraints. In addition to didactic lectures, it provides opportunity to share articles, presentations, offers time flexibility and a greater opportunity for social interaction. It often takes away the stage fear while delivering lectures, direct questions can be placed to the teacher verbally or using the messenger option or even anonymous questions can be placed if needed.

Online e-learning method has its peculiar disadvantages. Most commonly decreased participation of remote participants, limited interactive discussion and often a feeling of exclusion felt by remote participants. Poor audio transmission, loss of image quality and erratic audio feedback are the technical concerns. Participants often require some time to get acquainted with various features available in the software so as to use it to the maximum

benefits.^{10,11}

Similar problems were encountered by students of our college during the online sessions. Maximum students were from rural areas and faced technical concerns therefore found online lectures difficult to grasp.

Sivarajah RT et al in 2018, reviewed four innovative teaching methods for radiologists including audience response technology, long-distance teaching (online teaching), flipped classroom and active learning and recommended integration of such techniques to make learning more engaging, more interactive, and more effective.¹²

Assessment can be done on above methods as further scope of study. As Assessment is a central feature of any curriculum and can rightly be considered as the bridge between teaching and learning.¹³

CONCLUSION

Teaching is an art to impart knowledge to the students. It has evolved over time and now a days supplemented with various audio-visual aids. From this survey it can be concluded that a combination of chalk and board method along with power point presentation has been the most preferred modality till now, however there is a growing evidence in favour of newer methods of teaching. Additionally, with reduced curriculum duration of Ayurveda courses, it becomes imperative for teachers to innovate and make use of available technology such as impartus and online lectures. Overcoming the technical concerns, this will go a long way to effectively communicate the core topics in a time efficient manner.

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