

Perceptions of MBBS Students Regarding E-learning during COVID-19 Lockdown

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ABSTRACT

Objective: Considering the relatively recent advent in teaching learning process in India, the teachers and students are in process of acquainted with the new E- learning system. At this point, students' opinion and viewpoint is important. The needs of the students can be explored and opinion regarding blending of virtual teaching can be done. The objective of the study was to find out the perceptions of students regarding E-learning during lockdown period of COVID-19 pandemic.

Methods: A descriptive cross sectional study was conducted at Government Medical College and Hospital, Aurangabad, India. A sample size of 360 was calculated. MBBS students of all levels participated in this study. A Google questionnaire was developed and was validated by Medical education unit of the college. A pilot test was given to 25 participants to test the validity of Google questionnaire. Then the Google questionnaire was mailed to the students. The responses were analyzed with the Graphpad software 5 and Frequencies and percentages were computed for demographic data.

Results: Total 394 responses were received. 216 (55.5%) males and 178(45.5%) females participated in the study. Mobile phones was used by 224(57.6%) students and remaining 170(43.7%) use laptops for the study. Overall only 7.2 % students preferred to use only E- learning. 31.1% students preferred face to face learning. And majority 61.7% preferred a combination of face to face and E -learning as useful method of learning.

Conclusions: Students did not prefer E- learning over classroom learning. They admit the usefulness of E -learning. But, classroom learning with rational use of E -learning is preferred by the students.

Key Words: E- learning, COVID-19, Face to face learning, Perceptions

INTRODUCTION

The influence of Information technology is tremendous in today's life. Every field is working with the help of technology and education sector is one of these. The E- learning was being developed during recent days starting from the E-conferences, Webinars and E -learning platforms, etc. But, during the lockdown period of COVID -19 infection; all educational institutes are closed down and many challenges are faced by teachers and students suddenly. There is no choice to select E- learning as a primary method of learning .The flourishing innovative

techniques and learning management systems both for teaching and assessment have taken a headway providing a solution for educators. It gives the policy makers an opportunity to implement the use of information technology during the quarantine days for covering the course. [1] Stakeholders involved including institutional administrators, teachers, students, etc are making considerable efforts to optimally utilize the available technology for continuing the process of education and minimizing the gaps that area going to result as a consequences of the current circumstances. [1,2]

There are several studies on significance and efficacy of implementation of E- learning. [1,3,4]

Many universities across the world are implementing it as a teaching method and it is widely accepted by the learners. [5,6] There are many reasons for its overall acceptability; to mention is Ease of use, Flexibility, and better control on environment. But, in spite of its multiple advantages; there are few limitations also like lack of student teacher communication, social isolation, network issues, etc. [5]

Despite the wide based adoption of E- learning worldwide; it was never thought to be the part of formal education in India until the spread of COVID -19 recently. [6] In fact, MCI has developed a new CBME curriculum which includes the Self - directed learning at every levels which is mainly dependent on E- learning. [7] The teachers are trying many ways of E- learning platforms for the conduct of effective education and many software are being explored to bring the maximum possible ease to the students.

Considering all this relatively recent advent in teaching learning process in India, the teachers and students are still in process of acquainted with the new system. At this point, students' opinion and viewpoint is important. The needs of the students can be explored and opinion regarding blending of virtual teaching can be done. Therefore, the study has been undertaken to determine the perceptions of students regarding the E- learning in COVID- 19.

METHODS

The cross sectional descriptive study was conducted at Government medical college Aurangabad, Maharashtra in the month of July 2020. The ethical permission was taken from Institutional Ethical committee. The total strength of the students is 500 MBBS. A sample size of 360 was calculated. MBBS students of all levels participated in this study. The students were briefed about the study on their WhatsApp group and informed consent was taken

online. A Google questionnaire was developed and was validated by Medical education unit of the college. The questionnaire was having 23 questions based on 5 point likert scale. 5 items of questionnaire were recording the demographics, one about the gadget used and the remaining were determining the positive and negative perceptions of students about E -learning. A pilot test was given to 25 participants to test the validity of questionnaire. Then the Google questionnaire was e mailed to all the students. The responses were analyzed with the Graphpad software 5 and Frequencies and percentages were computed for demographic data.

RESULTS

Table I: Demographics Gender, Year of study & use of Gadget

	Frequency	Percentage%
1. Gender		
Male	216	55%
Female	178	45%
2. Year		
1 st	200	50.76%
2 nd	94	23.85%
3 rd	100	24.38%
3. Use of Gadgets		
Laptop	170	43%
Mobile	224	57%

Table II: Overall perceptions of students about E learning

	Responses	N %
Overall perception	Positive	30.8%
	Negative	69.2%
Future learning preference	Positive	47%
	Negative	53%
E learning is better than Face to face learning	Positive	43.6%
	Negative	56.4%
Interpersonal communication	Positive	33%
	Negative	67%
Usefulness regarding practical demonstrations	Positive	35.7%
	Negative	64.3%
Preference of E learning graduates in jobs	Positive	39.8%
	Negative	60.2%
Challenges	Positive	67.5%
	Negative	32.5%
Preferred mode	Positive	61.7%
	Negative	38.3%

A total of 394 MBBS participated in the study. The demographics are in Table I. 216 (55.5%) males and 178(45.5%) females participated in the study. Mobile phones was used by 224(57.6%) students and remaining 170(43.7%) use laptops for the study. Overall only 7.2 % students preferred

to use only E- learning. 31.1% students preferred face to face learning. And majority 61.7% preferred a combination of face to face and E- learning as useful method of learning. The overall perceptions of students are recorded in Table II.

DISCUSSION

Our study indicates that amongst the 394 students, 43.7% students use laptop as their gadgets for E- learning and remaining 57.6% use mobile phones. 30.8% students were showing positive, 69.2% showing negative attitude towards E- learning. But, majority of the students felt face to face learning in combination with E- learning is better option than E- learning. The negative factors related to E -learning were forcing the students for not choosing the E -learning as a primary tool.

Most of the students were using mobile for as gadgets as compared to laptops. This factor is consistent with the study conducted by [8] where mobiles were preferred for E- learning over laptops. A study [9] observed that use of mobile is easy way to have interaction with the teachers and hence it is preferred. Use of laptops is the next choice for many of the students. A study [10] showed that the students prefer laptops for their E -learning activities. A very common observation amongst all these studies is that E- learning can be used anytime and anywhere which is similar to our study.

Post COVID, the students are forced for E-learning and they are not having any other choice. And hence, in this pandemic the perceptions recorded as “E-learning less useful’ mainly due to its practical limitations in countries such as China, Singapore, Pakistan, etc. [11] still the usefulness of E- learning is reported for online learning over face to face by some studies [12] Many studies reported face to face learning as better option [13] as similar to our study. A study [14] concluded E-learning as satisfying.

One of the study also pointed out about misusing the identity by students in E

-learning [14] Online learning is not secure but, this point was not observed in our study.

Our study observed face to face learning / mixed learning as better approach. A study in Singapore reported to have no significant difference in face to face learning and E- learning outcomes. The study also reported to have less Student Teacher interaction in E- learning which is also observed in our study. In the COVID-19 pandemic, the interpersonal communication becomes a prime importance for the better psychological status of students. The medical students feel that for their practical hands on learning there is no alternative and clinical personal learning can never be replaced. And hence the students do accept the importance of E-learning but prefer to use blended approach of learning.

CONCLUSION

The study concludes that Face to face learning is still favored by students over E -learning. The students accept the advantages of E- learning but prefer better mixed blended learning pattern over only E -learning. The interpersonal communication was the main limiting factor in this COVID-19 era.

Limitations: The observations are limited to single institute only. Involvement of other institutes can be utilized for generalized statements.

Recommendations: The study recommends to have the perceptions of teachers also. It further recommends that Administration and faculty members should provide better environment and necessary measures for better understanding in the COVID pandemic situation.

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