



Perception and Knowledge of First Year MBBS Students towards E-Learning: A Cross Sectional Study

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I. INTRODUCTION

Learning is a process of achieving knowledge, skill, and performance. Thus learning is ultimately considered one of the fundamental pillars of society changes . A new method of learning nowadays by using computers, internet and e-resources is E-learning.^{1-3.}

Nowadays, technology has obviously made our lives easier. That means internet technology has been considered as an important medium for many aspects of our lives including academic learning. Teacher in higher education are under pressure to provide more effective and efficient learning environments, new teaching paradigms and educational opportunities and experiences to their students. Therefore, teachers always are looking for ways to make their educational initiatives more effective.⁴ The learning experience in higher education has shifted paradigms from an teacher -focused approach to learnercentered pedagogical methods .⁵

Computer education amongst medical undergraduates in developed countries is at a relatively higher level in comparison to students of developing resource poor countries^[6]. Studies have shown that students at resource poor settings lack the necessary skills to use computer-based learning platforms effectively and are therefore at a disadvantage^[7]. Lack of resources, time and structured training programmes are amongst the reasons for the low computer literacy of medical undergraduates in developing countries^[7]. In this COVID era most of the teaching is through online mode. Hence we have planned this study in first year MBBS students to assess the perception and knowledge towards e-learning.

II. METHOD

This cross sectional study was conducted after getting clearance from institutional ethics committee. A questionnaire was given online in google form to the first

MBBS students who consented for study of NKP Salve institute of medical sciences & research centre and lata mangeshkar hospital, Nagpur. Total 150 students from these college were considered for this study population. The students whodidn't give consent for participation were not enrolled in the study.

The link of questionnaire was sent through E-mails and Whatsapp to the student. They were asked to choose and tick response to each question. The identity of the student was not disclosed on the response sheet. The participants were also assured that their responses will not alter the academic assessment and were encouraged to provide feedback with free mind. The results were analysed blindly from the data generated . Each item in the questionnaire was rated based on a five-point Likert scale (1-strongly disagree, 2-disagree, 3-Dont know, 4-agree and 5-strongly agree).

Statistical analysis:

Online responses were analysed for number and percentage.

III. RESULT :

Out of 150 student 132 students participated in this study. The evaluation of those 132 students has been summarised in table 1 and table 2. all of these students have smartphone and few (24.2 %) use combination of laptop and phone. As depicted in table 1 majority of students (52.3%) feel elearning along with Traditional teaching is favourable alternative. 47% conveyed studying online help them write answers in exam. 57% of students felt elearning need advanced technical knowledge .Maximum were aware of various educational web sites related to academic. However, many of them spend more time on social sites like Facebook, WhatsApp, YouTube etc. instead of educational web sites.



Table 1 : students perception towards elearning

Indicators	Strongly disagree	Disagree	Don't know	Agree	Strongly agree	Total
Online learning is more comfortable and enjoyable	21 (15.9 %)	62 (47%)	8 (6.1%)	37(28%)	4(3%)	132
E-learning enhances my problem solving skill	2 (1.5%)	38 (29%)	27(20.6%)	52(39.7%)	12 (9.2%)	131
e-learning is a favourable alternative to traditional based system	24 (18.2%)	51 (38.6%)	14 (10.6%)	38 (28.8%)	5 (3.8%)	132
elearning along with traditional teaching is a favourable alternative	8 (6.1%)	11 (8.3 %)	13 (9.8%)	69 (52.3%)	31 (23.5%)	132
I feel insecure about elearning.	5 (3.8%)	50 (37.9%)	27 (20.5%)	37 (28%)	13 (9.8%)	132
e-learning helped me in writing exams.	23 (17.6%)	45 (34.4%)	19 (14.5%)	41 (31.3%)	3 (2.3%)	131
I spend more time on other social sites than e-learning sites.	10 (7.6%)	41 (31.3%)	17 (13%)	52 (39.7%)	11 (8.4%)	131
e-learning needs advanced technical knowledge.	4 (3%)	35 (26.5%)	14 (10.6%)	57 (43.2%)	22 (16.7%)	132

We found 58.3 % (table no 2)students felt convenience is the important feature of elearning as they can seat home and study whenever required .surprisingly only 18 % enjoy using computers over textbook .

Table 2 : students knowledge towards elearning

Indicators	Strongly disagree	Disagree	Don't know	Agree	Strongly agree	Total
i need training programme for e-learning usage.	10 (7.6%)	56 (42.4%)	27 (20.5%)	34 (25.8%)	5 (3.8%)	132
I use different educational blogs for interaction.	6 (4.7%)	32 (24.8%)	22 (17.1%)	65 (50.4%)	4 (3.1%)	129
I enjoy using computers than textbooks in my studies.	37 (9.28 %)	69 (52.3%)	8 (6.1%)	16 (12.1%)	2 (1.5%)	132
I believe that convenience is an important feature of e-	0.8 (1%)	17 (12.9%)	25 (18.9%)	77 (58.3%)	12 (9.1%)	132



learning.						
I prefer video and animation to study my subjects for better understanding if i don't understand the topic during class.	3 (2.3%)	8 (6.1%)	6 (4.6 %)	72 (55%)	42 (32.1%)	131

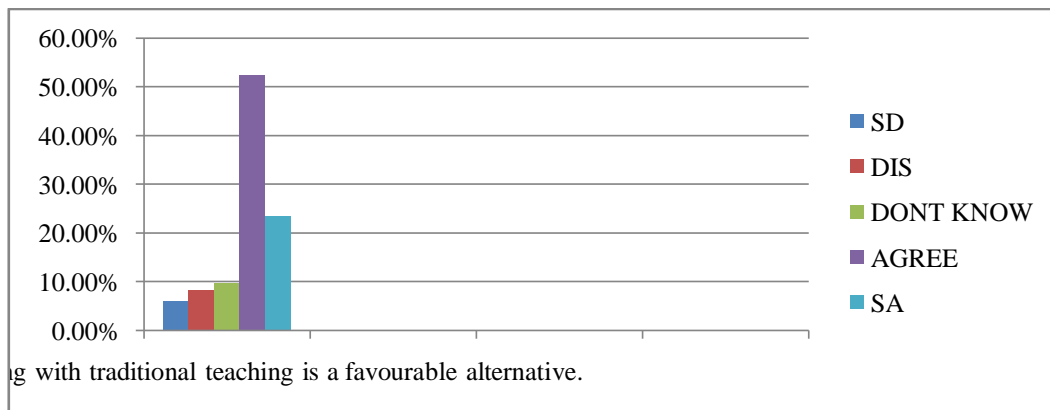


Figure 1. e-learning along with traditional teaching is a favourable alternative.

IV. DISCUSSION

We found that e learning cant be a complete alternative to traditional teaching as many student feel insecure about e laearning ,simultaneously feel convenient as they can sit home and study whenever required .Also this students of todays generation don't need much training about gadget opration .

First year MBBS use textbooks and classroom notes to study . However many times students do not understand certain topics and either skip them or just try to mug up. To resolve this issue elearning helped and students have already started using it.

The number of students in a class is usually high and the student teacher ratio is poor, especially in private medical colleges. First MBBS curriculum is too vast for the given timeframe of one year. We found that with availability of gadgets like computers, smart phones ,easy access to information over internet and in current COVID situation MBBS students are using e-learning modalities for studying and understanding medical subjects.

First year students frequently visit Academic blogs, open information sites like Wikipedia, You-tube, various publishing houses or even privately designed websites etc. and use the information provided for e- learning.⁸⁻¹¹⁾

This study also found that Watching animation and video helped first year MBBS student understand complex topics and concepts in less time.This is in collaboration with study done by Choules AP et al.¹⁰, ruiz JG et al ¹¹and Harley KN et all.¹²

With rapid changes in medical field and future needs, it has become necessary for medical teachers to keep themselves upto with latest developments in respective fields. This may be tough by many teachers especially by the senior or elderly ones. E-learning compliments serious learners. However,one of disadvantage is student may get distracted by social sites while surfing the internet over mobile or computers.

The role of teachers in Classroom remains undisputed. Even though computers have become part of the overall education process, it cannot fully replace teachers. So we found that e-learning along with traditional teaching is best way of teaching for first year MBBS student.

V. CONCLUSION

We found that first-year medical students are using e resources for understanding and learning various topics. Improving the techniques and strategies in the teaching learning process has been the focus of most institutions today. Developing new tools that will aid skill and knowledge transfer with less



effort and time but with quality will totally modify the traditional approach of learning which are geared towards modernization.

Also the research found out that the student's attitudes towards e-learning are positive which means that they can actually adapt to a learning environment where lessons and topics are delivered online and where they can acquire skills and knowledge online. So esources suppliments the traditional teaching in first year mbbs student.

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