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Perception of undergraduate students towards E-learning vs. Traditional Learning in a Public Sector Medical College.

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ABSTRACT... **Objective:** The e-learning technique for teaching has been gradually active in undergraduate medical education in current years. This article serves as an early exploration into medical student perceptions of the benefits and limitations of the E-learning. **Study Design:** Prospective study. **Setting:** Sahiwal Medical College Sahiwal. **Period:** 1st February 2020 to 31ST March 2020. **Material & Methods:** To determine the perception of undergraduate students towards E-learning vs. Traditional Learning the students of the 4th year and Final year MBBS were provided with a questionnaire. Students of Sahiwal medical college have already been taught via both methods i.e., traditional face to face teaching and via video lectures and WhatsApp e-learning. **Results:** *Students' perception of E-learning as compared to Traditional learning:* Fifty-two % students disagreed with that *Traditional learning is more difficult and challenging than E-learning*. Out of 182 responses again 54 % of the students disagreed with the fact that *Learning materials or recorded lectures are as effective as face-to-face teaching/ classroom situations.* **Conclusion:** To date in our study, the students' reaction to e-learning solicitations in undergraduate medical education is not much optimistic. Moreover, students generally did not express strong satisfaction for active learning modalities over traditional lecture-based learning.

Key words: E-learning: Electronic Learning, ICT: Information and Communication Technology.

INTRODUCTION

Conventional classroom lectures are still normally utilized in college medical training. In any case, classroom talks can be viewed as instructor-centered systems that help latent learning in the interest of learners.[1] Conversely, dynamic learning techniques (for example students' chances to partake, self-coordinated, and participate in their own learning) are just bolstered by grown-up learning hypotheses. But it has additionally demonstrated to be useful for long haul learning and the improvement of self-coordinated learning skills.[2] Moreover, accreditation guidelines currently officially necessitate that clinical projects remember open doors for clinical students to work for dynamic learning conditions, with the goal that they can create deep rooted learning abilities (autonomous recognizable proof and

assessment, Analysis and blend of information) is alluring by present day doctors.[3]

Given these fleeting contemplations, accreditation, and teaching method in undergrad medical instruction, numerous medical experts are currently applying components of the homeroom altered instructive procedure to their training.[4] In the customary classroom model, students are first presented to instructive substance through educator centered useful talks.[5] Information would then be able to be improved through post-address coursework (schoolwork) that offer possibilities for students to apply their newly learnt information self-governing (usually without correspondence or contact with partners or educators). In this structure, students are first presented to instructive substance before formal

class meetings through readings, recordings, or other electronic activities that are officially relegated.[6] Given that students have just procured information through this underlying "schoolwork" stage, ensuing semester time can be committed to exercises that permit students to apply their insight to troublesome issues in a domain that cultivates coordinated effort with friends, remarks, and direction from educators.[7] As to modified Bloom Taxonomy, the conventional lecture has to a great extent put resources into class time (as educators and students interface eye to eye) in encouraging information work at a lower level (getting and seeing genuine information), while this arrangement gives a chance to students to partake in higher discernment (application Analysis, assessment, and amalgamation of information).[7] In spite of the fact that staff eagerness, positive impression of students, and gains in learning results have been portrayed, somewhat, in different orders.[6-9]

It is hazy how the model is gotten by undergrad medical students. So the point of the current survey is to investigate the utilization of the philosophy in medical advanced degree. This assessment will focus to perceive leanings in both the pre-class and in-class stages. Likewise, this survey will concentrate on the perspective on medical students, and explicitly decide the impression of medical students (qualities just as admonitions) of this strategy just as the impact of e-learning on medical students' learning.

The current study will demonstrate a blended reaction to the college students' view of e-learning versus conventional learning at the medical college in the public sector however it has not been attempted in Punjab previously. This experience will help create relative data for proof based practices to improve the outcomes and nature of medical teaching in the Pakistani population.

MATERIAL & METHODS

This is an analytical questionnaire-based investigation to decide the perception of undergraduate students towards e-learning versus traditional learning in a public sector medical college. The questionnaire was appropriated by WhatsApp utilizing web as a result of the COVID-19 pandemic. The students of the fourth year and Final year MBBS were provided with the questionnaire wherein they addressed their decisions with respect to their own recognition about e-learning. Students of Sahiwal medical college Sahiwal have just been educated by means of the two techniques i.e., conventional face to face teaching and instructing through video talks and WhatsApp e-learning. So it turned out to be simple for the students to look at the two strategies.

Ethical approval was obtained beforehand from Institutional Review Board of Sahiwal Medical College Sahiwal. Convenient sampling technique was used.

The data of the questionnaire were received through WhatsApp and various frequencies and comparisons were made utilizing SPSS-24.

RESULTS

An aggregate of 182 students partook in the overview with a fourth year: final year proportion of 59:41. The response rate was 91%. Grouping of the survey questions appears underneath and frequencies are presented as pie graphs in Figure-1 to Figure-10.

Students' perception of E-learning as compared to Traditional learning

Fifty-two % (94) students couldn't help contradicting that Traditional learning is more troublesome and testing than E-learning. Reacting to the inquiry E-learning framework is an option in contrast to the conventional arrangement of educating; an equivalent level of students (65-36%) concurred and opposed this idea. Out of 182 responses again 98 (54 %) students couldn't help contradicting the way that e-learning materials or recorded lectures are as viable as face to face instructing circumstances. Likewise, 96 (53%) students differ that e-learning is more inspiring than conventional learning. Despite the fact that the reaction to the inquiry E-learning adapting course materials are more complete than customary training materials

discovered 83 (46%) students in understanding. In light of another inquiry expressing are you ready to perform better in tests utilizing the E-learning framework, generally, students (85-47%) opposed this idea.

Students' perception towards E-learning as future of learning

Meanwhile 103 (57%) students additionally differed that E-learning is an appropriate method for training for medical students in Pakistan. In spite of the fact that students were with the understanding (145-80%) that information and communication technology (ICT) assume a compelling job in advancing instruction and comparably 96 (53%)students felt that E-learning frameworks can achieve the intriguing needs of present occasions for education. Regardless of positive students' discernment towards E-learning outcome to the above inquiries, 80 (44%) students were of the perspective that E-learning ought not to be proceeded as future methods for learning.

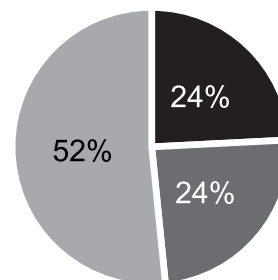**PIE CHARTS SHOWING FREQUENCIES OF RESPONSES BY STUDENTS**

Percentage of Students
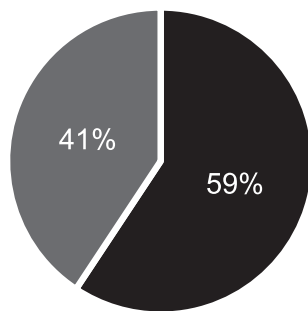
■ 4th year ■ Final year
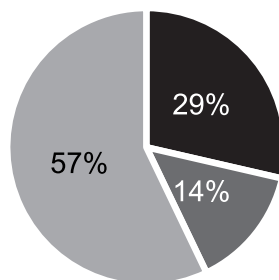
Figure-1

Traditional learning is more difficult
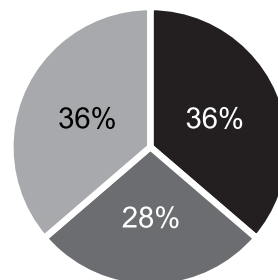

■ Agree ■ Neutral ■ Disagree

Figure-2

E-learning is suitable means of education in Pak
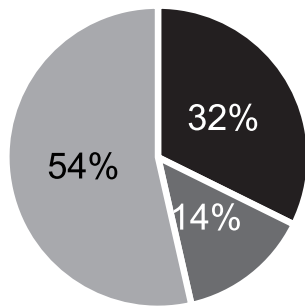

■ Agree ■ Neutral ■ Disagree

Figure-3

E-learning is an alternative to traditional system
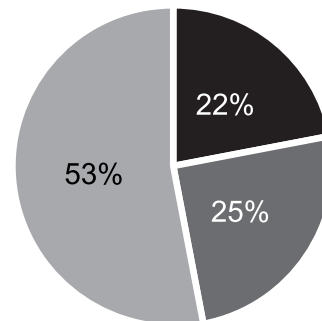

■ Agree ■ Neutral ■ Disagree

Figure-4

Recorded lectures are as effective as traditional lectures
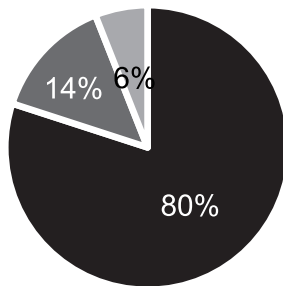

32%
14%
54%

■ Agree ■ Neutral ■ Disagree

Figure-5

E-learning is more motivating

22%
25%
53%
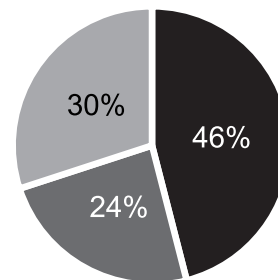
■ Agree ■ Neutral ■ Disagree

Figure-6

ICT play important role in spreading education

14% 6%
80%

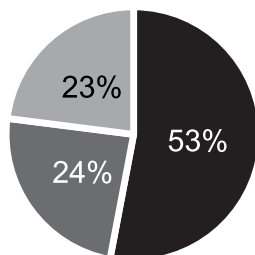■ Agree ■ Neutral ■ Disagree

Figure-7

E-learning course material are more comprehensive

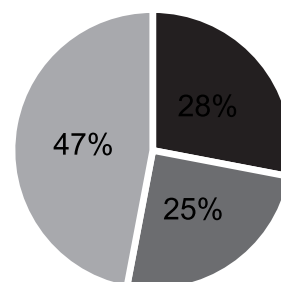

30%
24%
46%

■ Agree ■ Neutral ■ Disagree

Figure-8

E-learning systems can fulfill the challenging needs of present times for teaching masses

23%
24%
53%

■ Agree ■ Neutral ■ Disagree

Figure-9

Able to perform better in exams with E-learning

28%
25%
47%

■ Agree ■ Neutral ■ Disagree

Figure-10

DISCUSSION

The results of our study didn't show extraordinary help for e-learning as a viable technique for educating medical science. Students didn't pronounce it superior to customary routine lectures. Students accepted that e-learning was not progressively alluring and charming and that this style of education didn't have a lot of effects. These feelings were additionally reflected in students differing that E-learning was a superior learning experience and it ought not to be utilized routinely for an assortment of themes in medical educational plans.

The online lectures and E-learning by means of WhatsApp were done at Sahiwal Medical College Sahiwal because of constrained lockdown due to the COVID-19 pandemic. Such e-learning practices can be exceptionally valuable for the students during circumstances such as the present.[10]

It was discovered that conventional lecturing is a viable strategy that improves clinical students' enthusiasm for their self-learning capacities. Session materials showed that students recommended they are less agreeable and like to take interactive lectures than to go for video lectures. This outcome was in opposition to the outcomes found by Arksey et al., 2005.[11] Kamal et al., 2019 expressed in their examination that video lectures give adaptability in learning and a chance to survey and rehash courses which in inconsistency to our investigation.[1] The larger portion of the study participants felt that the pre-class material offered for planning upgrades their sidelong reasoning and gives a superior correlation among information and application than the idea instructed. Besides, it is commonly recognizable in our investigation that students discovered e-learning less persuading than the customary methods of educating. Forty-six percent of the class showed that they acknowledged E-adapting course materials more far-reaching than those of conventional training which was additionally found by Brame et al., 2013.[6]

The student's instructive climate is a blend of physical, social, and psychological subdivisions. The execution of advancements that improve the learning condition in classroom teaching empowers a dynamic comprehension of the subject, particularly in test planning. Dar et al., (2017) referenced that student's discovered e-learning as a superior method to educate in their planning too which was likewise in opposition to what we found in our study.[2] In past studies, a relative exploration between various techniques for training reports has demonstrated that coordinating problem-based learning, video addresses, and different advances have demonstrated to be a strategy successful for teaching theory and clinical aptitudes in medical institutions.[17,18]

All that importantly, dynamic learning experiences during the teaching meetings were not favored by our students, anyway they shared their interests with respect to the defective advantage of this education in medical educational programs, which may help them not exclusively to become dynamic students however in acquiring ideal evaluations. Another explanation for students' dissatisfactory reaction towards e-learning can be psychological sluggishness because of delayed lockdown due to the COVID-19 pandemic.[19] A past report found that instructing by E-learning is valuable in showing delicate themes, for example, youth incapacities and custom curriculum for undergraduate medical students[13], to show particular points, for example, glaucoma and visual injury[20], sicknesses related with various and numerous patients in nursing practice[21,22] in learning ECG[23], histology between medical students and more give times to basic reasoning.

The arbitrators of this study feel that a troublesome part of the e-learning is to give adequate material to students and create provocative situations for in-class meetings. Most teachers have restricted involvement with making or distinguishing content and may expect that change may not be acknowledged in their environmental factors or condition. Be that as it may, limit working through training classes can address this difficult.

Albeit numerous students express concerns (eg,

absence of understudy readiness and variable learning conditions across little gatherings) the face-to-face components of the e-learning, these worries might be tended to by proper preparation for facilitators who show the mall group components in e-learning.

Notwithstanding benefits on academic examinations, the e-learning doesn't seem to block learning and can help create important deep-rooted learning aptitudes in undergrad medical students. Hence, progressively medical schools and medical instructors are probably going to depend on the E-learning going ahead.

CONCLUSION
The students' reaction to e-learning applications in undergrad medical education in our investigation isn't a lot of positive. Additionally, students by and large didn't communicate solid fulfillment for dynamic learning modalities over traditional lecture-based learning. Further studies are needed with larger sample size.
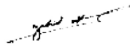**Copyright© 24 Sep, 2020.**

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AUTHORSHIP AND CONTRIBUTION DECLARATION

Sr. #	Author(s) Full Name	Contribution to the paper	Author(s) Signature
1	Zahid Kamal	Conception and design of work, resutls compiling.	
2	Ahmad Zeeshan Jamil	Help in biostatics and data analysis.	
3	Muhammad Waseem	Supervision and revising it critically for important intellectual content.	
4	M. Junaid Iqbal	Final approval of the version to be published.	
5	Nauman Aziz	Analysis and interpretation.	
6	Maryam Rafiq	Write up of the article.	