

ORIGINAL ARTICLE

Perception of MBBS Students on Hybrid Teaching in Covid-19 Era: A Survey of Public Sector Medical University

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ABSTRACT

Aim: To explore the perceptions, limitations and recommendations for hybrid teaching.**Methodology:** This is a cross sectional study, conducted in the academic session of 2021 among the students of Dow medical college including third years through final years. Convenient sampling is used. The questionnaire was created on Google and forms were emailed to the students. Likert scale is applied to record the responses.**Results:** Total of 102 students of both genders filled the questionnaire. Students were mostly from third year, fourth year and final year. Most of the students had no previous experience of e- learning. 36.3% students agreed that hybrid teaching is better than face to face or online sessions alone. 31.4% were of the opinion that hybrid teaching covers the strong points of both face to face and online teaching.**Conclusion:** Covid-19 makes classroom medical education difficult but blended or hybrid teaching and learning would seem to be the perfect solution to overcome the challenges.**Keywords:** Hybrid teaching, distance learning, Covid 19

INTRODUCTION

Online learning systems are being used in many other disciplines but it is comparatively a new concept in Medical Education. The existing situation led to a substantial challenge for educators to develop an alternate effective learning system which could be used to stipulate and support quality medical education to the students. This provided an opportunity to utilize online teaching and learning tools to fill in the gap created by the interruption of traditional teaching due to the Covid-19 pandemic^{1,2}.

The objective of the study was to explore the perceptions, limitations and recommendations for hybrid teaching.

METHODOLOGY

Hybrid learning can be explained by this figure



In our study, the online component of teaching was through the online lectures that were delivered using zoom meetings. It includes topic discussion, videos for examinations and interactive sessions in the end. These lectures were then uploaded on LMS after zoom meeting and were available for students to study and download.

Table 2: Students' perception towards online teaching

Questions	Strongly disagree	Disagree	Uncertain	Agree	Strongly agree
Study topics are well prepared in online learning	16(15.7%)	28 (27.5%)	35 (34.3%)	20(19.6%)	3 (2.9%)
Assessments are more suitably conducted online than in conventional exam rooms	30(29.4%)	39(38.2%)	23 (22.5%)	7 (6.9%)	3 (2.9%)
You find yourself confident to interact with teachers and ask questions	16(15.7%)	34(33.3%)	28 (27.5%)	17 (16.7)	7 (6.9%)

The students were divided in small groups and called in wards for history taking and examinations for face-to-face learning with strict SOPs. The faculty was assigned to take their classes in ward and bedside examination with the maintenance of social distance and reduced exposure.

Single centered cross-sectional study which was conducted at Dow University, in 2021 among the medical students of 3rd year to final year. The questionnaire created on Google forms after consultation with subjects' experts. A pilot study was conducted and correction was made to the survey form where required and emailed to the students. The study tool is structured and designed in the English language. All the collected data was analyzed in SPSS 23.

RESULTS

Table 1: Demographic Characteristic (n=102)

Variables	Classification	n	(%)
Age (yrs)	18-19	1	1
	20-21	47	46.1
	22-23	49	48
	24 and above	5	4.9
Gender	Male	25	24.5
	Female	77	75.5
Year	Year 3	43	42.3
	Year 4	34	33.3
	Year 5	25	24.5
Average GPA	<2.5	2	2
	2.6-3.0	9	8.8
	3.1-3.5	29	28.4
	>3.6	62	60.8
Previously enrolled in distance learning	Yes	18	17.6
	No	84	82.4

You do not experience any stress during distance learning	22(21.6%)	23(22.5%)	20 (19.6%)	30(29.4%)	7 (6.9%)
You have more time to review all the learning material after class	9 (8.8%)	19(18.6%)	23 (22.5%)	32(31.4%)	19 (18.6)
You can access globally and share lectures with your colleagues	13(12.7%)	4 (3.9%)	25 (24.5%)	43(42.2%)	17(16.7%)
You find it time saving compared to classroom	14(13.7%)	14 (13.7%)	21 (20.6%)	26(25.5%)	27(26.5%)
The interaction, feedback and answering questions is more effective	10(9.8%)	30 (29.4%)	20 (19.6%)	35(34.3%)	7 (6.9%)

Table 3: Technical issues in online learning

Questions	Strongly disagree	Disagree	Uncertain	Agree	Strongly agree
You face problems related to internet connections	2 (2.0%)	12(11.8%)	14 (13.7%)	31(30.4%)	43(42.2%)
There is improved learning compared to classroom	22(21.6%)	27 (26.5%)	30 (29.4%)	15(14.7%)	8 (7.8%)
You face problems due to unavailability/malfunction of learning devices	9 (8.8%)	18 (17.6%)	19 (18.6%)	34(33.3%)	22(21.6%)

Table 4: Students' perception towards hybrid teaching

Questions	Strongly disagree	Disagree	Uncertain	Agree	Strongly agree
You think that hybrid teaching (face to face and online teaching both) is better than face to face or online sessions alone	13 (12.7%)	16(15.7%)	23 (22.5%)	29(28.4%)	21(20.6%)
You feel hybrid teaching covers the strong points of both face to face and online teaching	10 (9.8%)	18(17.6%)	27 (26.5%)	32(31.4%)	15(14.7%)
Hybrid teaching overcomes both the limitations of the individual methods	9 (8.8%)	16(15.7%)	16 (15.7%)	24(23.5%)	37(36.3%)

DISCUSSION

In our study, we explored student's opinions toward major impediments they experienced during e-learning, the benefits of hybrid teaching to only online or physical teaching modalities. 34.3% students in general were uncertain that teachers were well prepared in online teaching study topics are well prepared in online learning. 29.4% agreed that interacting with teachers was more comfortable and stress free in distance learning encouraging them for more class interaction. Students preferred interaction with facilitators for better communication and learning opportunities. The balance among the various aspects and priorities has to be carefully considered by educators and programs to achieve the educational process³.

As the materials are accessible in learning management systems, 31.4% found these resources helpful and readily available. 42.2% found it more convenient to share with their peers. An international study agreed with that distance learning provided students with more control over curricular content and is adaptable.⁴ 63.7% students disagreed that assessment conducted online are more appropriate than in standard examinations. In one study, students in general favored hybrid modules to cover clinical aspects and patient interaction which was deficient in online teaching⁵.

In our study, 42.2% students also agreed that online lectures are not suitable for clinical subjects as it misses important aspects such as physical examination. In another study, students were of opinion that hybrid teaching (face to face and online teaching both) is better than face to face or online sessions alone and it can overcome the limitations of individual methods⁶. Though many were neutral in agreeing with benefits of e-learning. They approved that online learning can partly replace the traditional teaching

methods but not clinical skills that still need to be in hybrid modalities. They believe that a blended approach (traditional and e-learning) will be the most suitable for future medical training. In general, student's perception and feedback concluded that a more balanced approach in medical education will give optimum outcomes in terms of achieving learning objectives of curriculum.

CONCLUSION

COVID-19 makes classroom medical education difficult, but blended or hybrid teaching would seem to be the perfect solution to overcome the challenges.

Conflict of interest: Nil

REFERENCES

- Shahid R, Zeb S, Yasmeen S et al. e-learning and COVID-19 Pandemic: An experience by medical students of Rawalpindi Medical University Pakistan. *Journal of Rawalpindi Medical College*. 2020 Dec 30;24(4):363-7.
- Abid K, Bari YA, Younas M et al. Progress of COVID-19 Epidemic in Pakistan. *Asia Pacific Journal of Public Health*. 2020 ;32(4):154-6.
- Alkamel MA, Chouthaiwale SS, Yassin AA et al. Online Testing in Higher Education Institutions During the Outbreak of COVID-19: 2021;348:349.
- Qazi A, Naseer K, Qazi J et al. Conventional to online education during COVID-19 pandemic: Do develop and underdeveloped nations cope alike. *Children and Youth Services Review*. 2020 1;119:1055-82.
- Nepal S, Atreya A, Menezes RG et al. Students' Perspective on Online Medical Education Amidst The COVID-19 Pandemic in Nepal. *Age (in years)*. 2020 Nov 14;20(40):17-7.
- Sani I., Hamza Y., Chedid Y et al. Understanding the consequence of COVID-19 on undergraduate medical education: medical students' perspective. *Ann Med Surg (Lond)* 2020;58:117-119.

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