ORIGINAL ARTICLE



Academic Crisis During COVID 19: Online Classes, a Panacea for Imminent Doctors

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Abstract

Introduction COVID 19 made a serious impact on many aspects of everyday life. The world saw a paradigm shift in the education system favouring online learning during the constrains of pandemic.

Methodology To assess the attitude of the students towards online learning in subject of ENT, we conducted an observational study among 170 third year MBBS undergraduate students of our institute attending online classes through the student portal of our university website.

Results Our survey revealed students favoured online learning to sustain their academic interest and development during this pandemic. Yet, they perceived many challenges during online learning like lack of face-to-face interactions, lack of socialization, distraction by social media, technology related issues etc. Students also opted for a combined approach of learning in the post pandemic period.

Conclusion This article reflects the challenges faced during online learning and added the innovative methods that can be included to overcome the obstacles of online learning. During this period of COVID, one must embrace the alternative to classroom learning to keep up with one's academic development and can consider an integrated approach of learning after the pandemic.

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Keywords Covid-19 · Online learning · Classroom learning · Academic crisis

Introduction

COVID 19 made a serious impact on many aspects of everyday life. World Health Organisation (WHO) announced COVID19 as a global public health emergency of international concern on 30th January 2020 [1] and declared it a pandemic on 11th March 2020 [2]. The education system is one of the most impacted aspects of routine learning and daily life. The world saw a paradigm shift in the education system favouring online learning during the constrains of pandemic. Yet, the effects and efficacy of online education and the capacity to successfully teach digitally is questionable. This sudden and rapid transformation from an environment of conventional learning to virtual learning has made a great impact on the attitude of the students towards learning [3].

In our institute, regular undergraduate online classes are being conducted through student portal of our university website. This enables students to access the digital contents and the recorded lectures even after the class. To assess the attitude of the students towards online learning in subject of ENT, we conducted a short survey among third year MBBS undergraduate students of our institute attending ENT classes. This will also help us to assess the feasibility and mould our approach towards online classes.

Electronic supplementary material The online version of this article (https://doi.org/10.1007/s12070-020-02224-x) contains supplementary material, which is available to authorized users.

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Study Design

An observational, descriptive study based on designed questionnaire was conducted through google forms which was circulated among the third MBBS undergraduate students of our institute. Online classes are being conducted.

Study Population

A total of 170 third MBBS undergraduate students participated in the study.

Study Conduct

The designed questionnaire consisted of set of questions to know the attitude of undergraduate students regarding online vs classroom learning and to know what are the reasons for their likes and dislikes about online and class room learning.

Initial questions included socio demographic data and the Gadget being used for online classes. Part A of the questionnaire was based on the opinion of students towards classroom and online classes. Part B consisted of statements for which their opinion was obtained by Yes/ No/ May be responses and end questions on what kind of approach they would prefer during the pandemic either online or classroom and after this pandemic with the options of Online classes, Classroom classes and a combined approach were given.

Results

Our study included 170 students of which 78 were males and 92 were females within the age group of 20–24 years. The average attendance for online class was found to be 96%.

52% of the students opted for using mobile, 36% laptops and 12% of them used tablets as devices for online classes (Fig. 1).

Part A of the questionnaire (Table 1) suggested a comparable result in terms of content covered in both online (37%) and classroom learning (41%). 58% of the students felt understanding concepts is better in classroom learning while 52% students felt retention of the topic was better through classroom learning.

Majority of the students (59%) felt that they had better access to online study materials. Students favoured classroom learning in terms of student teacher interaction (54%), punctuality & discipline (77%), acquiring practical Gadgets used by the students

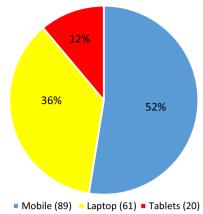


Fig. 1 Distribution of Gadgets used by the students

skills (90%). Students predominantly favoured online classes for doubt clarification (57%). Apprehension of exams were nearly equal in both.

Part B (Table 2) revealed students preferred online classes in terms of ease of participation, attending classes (91%) and time investment (67%). Students felt that the outdoor activities, group projects and development of communication skills were better in classroom learning (82%). 78% of the students sensed that poor internet connections, social isolation and eye strain as the commonest problems faced during online learning.

When asked a specified question regarding preference of classes during the pandemic, majority of the students preferred online classes (89%) to sustain their academic interest and development during this pandemic.(Fig. 2).

For the opinion of preferred approach of learning after COVID 19 pandemic, 31% of students opted for the option of only classroom learning, 16% opted for only online learning where as 53% of the students opted for combined approach of classes (Fig. 3).

Discussion

Since the serious outbreak of this global pandemic Covid-19 [1], majority of the countries practiced lockdown. Currently there are in excess of 26 million cases of Covid-19. Social distancing and restrictive movement policies are being implemented to curb this rising curve of cases [4]. It also has markedly deranged conventional education practices as most of the schools and colleges are being temporarily shut down. This present situation has made us implement an alternative and innovative approach in sustaining academics of medical undergraduates through online classes.

Table 1 F	Part A of	the questionnaire	
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S.no	Question	Online learning (%)	Classroom learning (%)	Both (%)
1	Understanding concepts of ENT is easier in	41	53	6
2	Coverage of content of particular topic is more in	37	41	22
3	Retention rate of content of the topic is better in	42	48	10
4	We can get access to good amount of study material in	59	27	14
5	Interaction among student and teacher is better in	41	54	5
6	Punctuality and self-discipline are acquired better in	16	77	7
7	Acquiring practical knowledge of ENT is more effective in	6	90	4
8	Clarification of doubts is easier in	55	33	12
9	Appearing for internal assessments is easier in	41	43	16

Table 2 Part B of the questionnaire

S.no	Statement	Yes (%)	No (%)	May be (%)
1	Ease of participation and attending classes during lockdown is better online	91	7	2
2	Online learning requires less of a time investment	67	18	14
3	Multiple choice questions incorporation during online learning adds up to the interest among students	74	14	12
4	Classroom learning prevents social isolation of the individual	72	16	12
5	Poor internet connections during the class causes loss of interest in online learning	78	13	9
6	Online learning causes decreased out-door activity, group projects, communication skills	82	11	7
7	Increased screen time during online learning can cause eye related problems	75	5	20

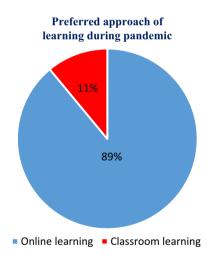


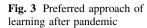
Fig. 2 Preferred approach of learning during pandemic

Due to the constrains of classroom learning in this indeterminate time course of pandemic, online learning has come to the forefront to partly resolve perplexity. Online classes are being conducted through the student portal since the outbreak of pandemic. The average attendance for the online classes was found to be 96% over a period of 5 months. Most of our students possess a mobile phone,

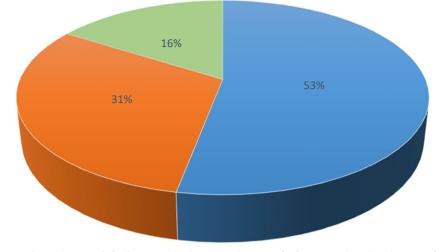
making it the most accessible and feasible platform to attend online classes (52%). 36% and 12% students preferred using laptops and tablets respectively as they might feel more distracted while using mobile phones. Students themselves gave the feedback that accessing online classes on mobile was sometimes distracting them. They feel the urge to access social media, check messages, answer calls while using mobile phones which leads to loss of interest and attentiveness during the class.

Conventional learning has face to face interactions, motivates one to learn, better interactions among student and teacher and most important a feel of togetherness in learning and sharing opinions. [5] Some of these aspects lack in online learning. Our survey suggested that although both methods of teaching covered almost equal content of a particular topic yet the students preferred classroom learning for understanding and retention of a topic. The students also preferred classroom learning as practical knowledge, punctuality and self-discipline is better acquired through a reciprocal interaction among teachers and student in a classroom.

Online learning creates a good platform for acquiring newer methods of learning with less apprehension among students in clearing their doubts, ease of participation, good coverage and understanding of the topic by usage of 3D



Preferred approach of learning after pandemic



Combined approach (90) Only Classroom learning (53) Only online learning (27)

animations, less time investment and easy availability of the resources to review the topics through the online portal. [6, 7] Our survey revealed a similar preference among the students. They also relished the concept of multiple choice questions incorporation during the class as it added up to their interest and attentiveness during the class. Flexibility and lowering the cost of transportation and accommodation with access from any part of the world are engrossing aspects of online learning. [7]

Long duration of online classes can cause eye related problems, distraction by social media. [3] Decreased outdoor activity, group projects, communication skills causes social isolation in an individual. [5] Our students also reported that 79% of them lost interest during online classes due to issues with the internet connection when the class went on for more than an hour. Sedentary life with decreased outdoor activity and project works was a major disadvantage of online classes as pointed out by 80% of our students. 75% of the students complained eye related issues like eye strain, epiphora and headache while attending long online sessions.

Technology related challenge and clinical skill training are the two paramount constraining factors. [7, 8] Other crucial constraining factors include student interest captivation and emotional wellbeing. These could be overcome by using simulation based training apps, establishing a fast and reliable internet connection, prior training of teachers in using this technology, flexibility in time and a shorter duration of classes. Incorporating virtual whiteboards, videos on clinical examination, 3D images, surgical videos if applicable, weekly one to one student teacher counselling sessions, regular feedback from the students may help in overcoming the obstacles and escalating favourability of online classes. In view of present scenario our students preferred online classes during pandemic which is similar to other studies. [3, 6, 9] Majority of our students preferred for a combined approach of teaching after the pandemic for their better academic development. This finding is similar to the study done by Rajab et al. [10].

Conclusion

One of the participants of our survey rightly said 'There is a difference to play football on ground and in mobile' but in this apprehensive socially distanced period of COVID, one must embrace the alternative to classroom learning to keep up with one's academic development. Though the replication of classroom learning is not completely attainable through online learning, yet it is a convenient method with ease of participation, sustaining the academics and maintaining the student teacher interaction amidst pandemic. A combined approach can be considered post pandemic for a finer learning with more innovative methods.

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Compliance with Ethical Standards

Conflict of interest The authors declare that they have no conflict of interest.

Ethical Approval Appropriate ethical clearance has been obtained from the institute.Informed ConsentInformed consent was obtained from all individual participants included in this study.

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