

E-learning during Covid 19 Pandemic.

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Research Article

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Abstract

Introduction: Teaching learning in the times of Covid 19 pandemic needs to be revamped in order to follow norms of social distancing. Therefore, online classes are a necessity now.

Methodology: We registered our institution on Microsoft Teams under educational institutes. Entire college faculty was registered along with undergraduates and post graduate students. E- classes were planned after a professional demonstration.

Results: The feedback of e classes given by students was encouraging. They were satisfied by the teacher's way of delivering lecture. The students felt, on line classes are almost similar to offline classes. The main hinderance in e-classes was internet connection.

Conclusion: The e classes helped to continue the teaching learning activities during restrictions because of Covid19 pandemic

Introduction

India is facing the novel corona virus (Covid19) pandemic as the rest of the world (1). Since the lockdown announced on 25th March 2020, the teaching activities are also suspended. Medical fraternity is on the forefront in fighting the pandemic at the same time medical teachers have added responsibility of teaching the medical students. As per government guidelines educational institutes are closed and online teaching is the only means to continue teaching -learning (T-L) activities, we decided to initiate T-L activities at our institute using Microsoft Teams. The students filled a feedback form after each lecture and we complied the responses received. This article is based on the feedback of online T-L activities.

Methodology

Microsoft Teams was the online platform chosen to initiate the e classes. Institute was registered on Office 365 and individual Ids and password were generated for each faculty and student. Teams were made as per admission batches for undergraduates. Faculties were made owners so that they were able to schedule classes well on time and share relevant information. The faculty who was supposed to take the class, scheduled it by filling in relevant information on the Calendar tab of Teams. The teaching roster was followed similar to offline classes. The faculty used power point presentation, drawings, white board and videos as means of delivering lecture. The mode of delivering content online was directed towards cognitive (power point presentation, digital white board), psychomotor (recorded videos and live videos) domains. The students were given link of google feedback form to be filled online. The questions in feedback form were mixed having Likert scale, yes/no responses and descriptive questions. The feedback was designed and validated by state medical university. The data was collected online and analyzed using Microsoft Excel. Appropriate statistics was applied.

Results

We received 2,791 feedbacks from students. The feedbacks were from all 4 professional years. About 98% students responded that class schedule was informed well on time. Almost 88% students felt that the teacher was successful in discussing the topic, out of this 56% student responded, teacher was very successful in discussing the topic (table 1). Approximately 80% of students understood the topic quite well which was taught. Almost 100% students felt that teacher's attitude was friendly and helpful during class. Students participation and discussion was there in 97% of classes as per feedback (figure 1). The teacher's preparation for class was excellent in 99% of responses.

There was a mixed response on comparison between online and offline classes 22.1% of students responded that online medium is superior, whereas 43% responded both as similar. The overall rating of e classes was very good (85%)(table2). Assignments were also given to students to be completed within a given time limit .The students posted their answers on the assignment segment of app.

In response to descriptive question which was asked to know student's views on ways to improve teaching, students desired to have digital chalk and board and more interactive classes. The most prominent hinderance was disturbance in classes because of bad network connection.

Discussion

India at present is facing the worst pandemic of the novel coronavirus. Till date there are 86,000 plus positive cases with 2695 deaths. Health care workers are in the frontline and working at their full capacity. Since the lockdown announced, academic activities are suspended but learning can't be stopped especially in medical schools. Therefore, we in our institute in central India have decided to start E-classes for the undergraduate and post graduate students. This is the first time we at institute level have initiated online teaching -learning activities. As it is said if you want to work you will find ways otherwise excuses. Thus, we searched for online platforms, faculty have been familiar to Zoom app, but due to security issues, we zeroed on Microsoft Teams, it's a student friendly application of Microsoft Office 365 and has many interactive features. The students on a particular team are able to access classes scheduled and therefore they know their classes for that day. The faculty used various means of delivering lecture, power point presentation was most common, followed by videos and white board. Cognitive and psychomotor domains were covered by various means of delivering content. Skill based video demonstration was done for example, neonatal resuscitation protocol was showed on a video and bag and mask ventilation technique was demonstrated live.

As per feedback received, majority of students were satisfied with the teacher's knowledge of subject and their art of teaching. The mode of teaching is new but almost all the teachers were able to conduct classes comfortably. At this point of time, the number of Covid positive cases in our city is not very high, so undergraduate students are not being utilized for community tracing or clinical work. Faculty of various departments is involved in Covid management, so not every faculty was able to conduct classes. The student's response to online classes was satisfactory but the problems in network was their main concern. The network connection has to be stable as large data is exchanged during online classes (2).

As country wide lockdown is going on students are at their homes so the network quality is a major problem while conducting e-classes. The importance of e -classes is felt in this time of pandemic and their utilization is a boon in these tough times (3). The students were sensitized regarding preparedness in pandemic and infection prevention- control through e- classes. While the pandemic is going on there is pressing need of health care workers and as many countries have put their students in clinical management, we in India should also be prepared. The undergraduate curriculum is to be delivered through various modes, during the restrictions it's not possible to have clinical postings, thus case-based learning was done in e classes (4). Teachers facilitated the students to build up the case and make differential diagnosis. Case based learning helps in putting forwards different clinical situations that may arise and thus understanding of disease becomes better (5). The pandemic is continuing and the online classes are helping academics to continue along with it (6). Covid 19 cases are rising all over country and we are now under Lockdown 4 Therefore the feasibility of e- learning as a means of off bed side training can also be explored (7).The interdepartmental movement of medical students increases their chances to get infected ,thus e learning provides an alternative platform for bed side teaching for which simulators , skill labs will be required(8).

Conclusion

E-classes are immensely helpful in these times of lockdown and restrictions. The teaching -learning activities are conducted successfully. The students believe offline classes are better but they are comfortable with e -classes also. The network issues are a major hinderance in smooth conduction of classes.

Declarations

Competing Interest: There are no competing interests.

The study has been approved by Institutional Ethics committee under Medical education projects. The need for consent was waived by ethics committee.

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Tables

Table 1

How successful was the teacher in discussing the topic in detail ? (5 - very successful)
2,791 responses

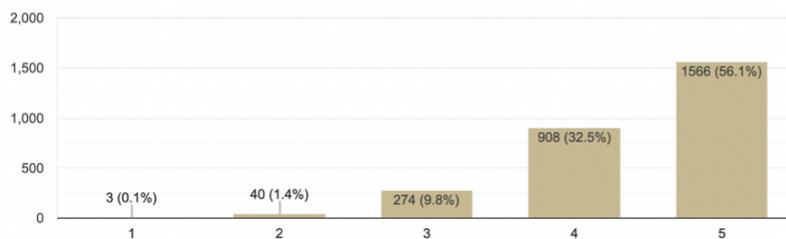
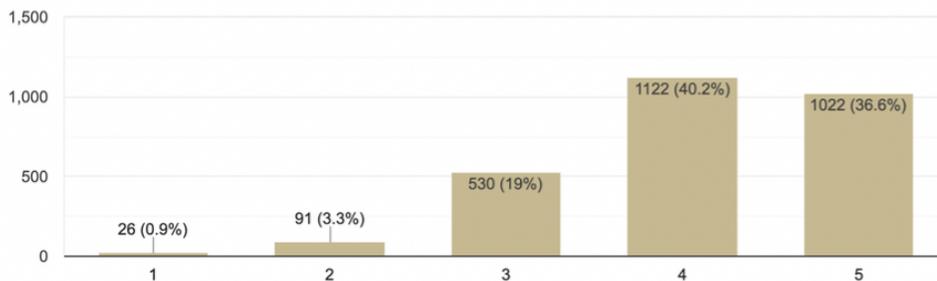


Table 2: Overall of rating of virtual class(1-5), 2791 responses.



Figures

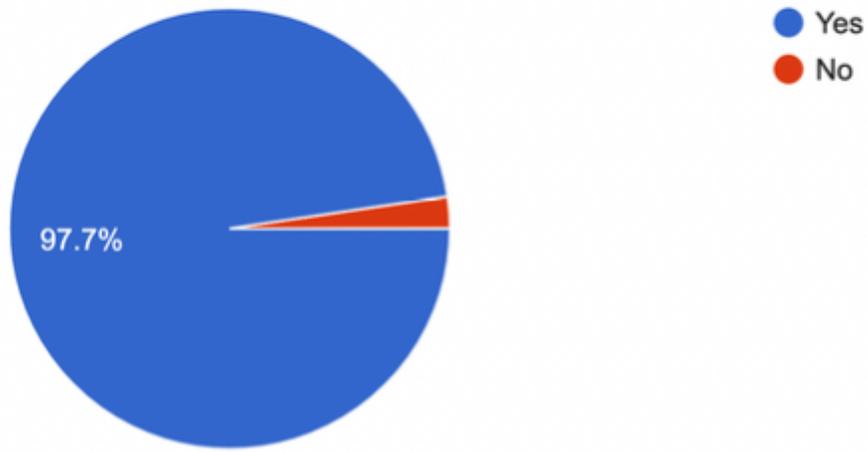


Figure 1

Student participation (2188 responses)