

A Study On Impact Of Online Education And Traditional Anatomy Teaching On Student

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Abstract: Background: The emergence of corona pandemic situation in india during april 2020 forced the institutes to send students to their respective hometowns. Faculty had no option but to continue teaching online in such situation. In comparison to other basic medical science subjects, learning anatomy online was felt difficult as the students were unable to understand the three dimensional structures in human body. Rising concerns among students urged to evaluate strength and weakness of ongoing online teaching and learning methods. Aim: To compare the effectiveness of teaching anatomy subject online anatomy theory and practical online teaching. Material And Methods: Study is conducted on 2019-2020 first MBBS batch 100 student participate in it from my collage. A cross sectional study was conducted among 100 MBBS first year medical students from Dr. M K. Shah medical college and research centre, Chandkeda, Ahmedabad. Informed consent was obtained from all the students prior to the start of the study. The online classes were conducted due to covid-19 lockdown in our institution from April 2020 as per the guidelines from government. The study was conducted by taking feedback from the students in the form of pre-formed questionnaire regarding the online classes in Google forms for 1st year MBBS students. Questionnaire consisted of information related to difficulties encountered by students during online class and understanding of subject during online class. Result: A 60% students agree that lectures are effective to understand in online teaching. 76% student use mobile for attend online lecture. 50% student disagree that dissection in anatomy can effective by online teaching. Online lecture on zoom is accepted method for online teaching by 78% of student. 69% students attend 30 minute online class out 60 min class. 90% student recommends that for dissection teaching in dissection hall is more effective. Again 75% student offline class for demonstration class is effective. 61% student facing internet issue during online class. Conclusion: Students preferred classroom teaching over online teaching for anatomy subject. Between the platforms used in online teaching, google meet has an edge over google classroom in terms of learning. [Chaudhari M Natl J Integr Res Med, 2022; 13(1): 105-108, Published On 26/01/2022]

Key Words: Anatomy, Traditional Teaching, Online Education

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Introduction: The current worldwide outbreak of covid-19 (the disease caused by severe acute respiratory syndrome coronavirus 2 (sars-cov-2)) has had a detrimental effect on the socioeconomic life of people like no other event in this generation's history. The disruptions in the educational process that we are facing are imposing a serious review of the pedagogic practice, incorporating new and necessary methods in the anatomy, histology and cytology curriculum in particular. Current advances in technologies are enabling us to use online teaching platforms, and interactive educational softwares making e-learning possible. He emergence of corona pandemic situation in India during April 2020 forced the institutes to send students to their respective hometowns. Faculty

had no option but to continue teaching online in such situation. In comparison to other basic medical science subjects, learning anatomy online was felt difficult as the students were unable to understand the three dimensional structures in human body. Rising concerns among students urged to evaluate strength and weakness of ongoing online teaching and learning methods online teaching method for lecture and demonstration class zoom app is used. In our India internet issue is bigger connectivity use. Again student attend online call by which screen mode is also important for study of anatomy larger screen in require. Again they are attending lecture offline at home so concentration time is big issue. For dissection and demonstration best teaching method is by seeing

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the original structure and doing themselves is best method. Nowadays various software and application available for online teaching.

Material & Methods: Study is conducted on 2019-2020 first MBBS batch 100 students participate in it from my collage. A cross sectional study was conducted among 100 MBBS First year medical students FRON DR M K Shah medical college and research centre, Chandkeda, Ahmedabad. Informed consent was obtained

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Results: Results are as follows.

Table 1: Online Teaching Survey 100 Student

| Sr No. | Question | Response | Number Of Student | Parentage |
|--------|--|--|-------------------|-----------|
| 1 | Lectures Are Effective To Understand In Online Teaching? | Strongly Disagree | 26 | 14% |
| | | Disagree | 39 | 21% |
| | | Neutral | 25 | 15% |
| | | Agree | 10 | 60% |
| | | Strongly Agree | 0 | 0% |
| 2 | Device Is Used To Attend Online Class | Mobile | 76 | 76% |
| | | Laptop Or Desktop | 24 | 24% |
| 3 | Dissection In Anatomy Can Effective By Online Teaching? | Strongly Disagree | 50 | 50% |
| | | Disagree | 21 | 21% |
| | | Neutral | 24 | 24% |
| | | Agree | 5 | 5% |
| | | Strongly Agree | 0 | 0% |
| 4 | Which Method Best For Online Teaching? | Zoom | 78 | 78% |
| | | Youtube Video | 22 | 22% |
| 5 | Concentration Time For Each Online Class | 30 Min | 69 | 69% |
| | | 40 Min | 21 | 21% |
| | | 50min | 10 | 10% |
| 6 | Dissection In Anatomy What Is Best Method Of Learning Anatomy. | Youtube Video | 05 | 05% |
| | | Dissection In Dissection Hall | 90 | 90% |
| | | Dissection Of Model By Using An Software | 05 | 05% |
| 7 | Best Method To Conduct Demonstration Class In Anatomy | Offline Lecture | 75 | 75% |
| | | Online Lecture | 25 | 25% |
| 8 | Internet Issue | No Internet Issue During Online Class | 39 | 39% |
| | | Internet Issue During Online Class | 61 | 61% |

Discussion: The COVID-19 outbreak that started in December 2019 deeply affected many sectors, including the economy and Education¹. Social distancing which is one of the most important elements in protection from the infection, has disrupted face-to-face (F2F) education in many countries and all educations have continued remotely^{2,3}. Distance medical education has revealed many problems that have not been

recognized before. Studies have showed that anatomy is one of the courses most negatively affected by distance medical education in the preclinical part of medical education⁴. Anatomy is recognized as one of the most crucial components of medical education^{5,6}. Anatomy entomological means “cutting up”, and traditional anatomy education (TAE) is based on dissection⁷. Both the increase in technological

alternatives and the insufficient number of cadaver donors has led to a decrease in cadaver dissection⁸. On the other hand, studies have revealed the negative Effect of cadaveric contact on students such as fear, anxiety⁹. In most countries, medical education for both lectures and laboratory classes has been transferred from the physical classroom to online^{10,11}. Anatomy education has been presented with various platforms, with multiple opinions regarding the conducting of online classes, and the sudden conversion to online^{12,13}.

Teaching sessions have covered key clinical conditions, case studies and examination questions via live-streamed tutorials through platforms such as Zoom,¹⁴. The online/ e-learning can be defined as the use of electronic technology and media to deliver, support and enhance both learning and teaching and involves communication between learners and teachers utilizing online content.”

The present study was aimed to assess the effectiveness of the online teaching in the subject of anatomy. With the impact of COVID 19 throughout the globe the regular teaching learning methods were found to be unfavourable to follow along with the guidelines of the COVID 19 restrictions. With strict rules and regulation and impact of lockdown throughout the country the whole concept of teaching methods was shifted from offline to online in order to continue the medical education of the Undergraduate students.

In anatomy teaching is in the form of lecture and practical, Practical include demonstration and dissection class, 60% student agree with online lecture that can understand content which teach to them by online lecture. The remaining students were of the opinion that online In another study the students preferred Classroom teaching over online teaching as they felt that theoretical nor practical aspects of anatomy could be learn effectively online¹⁵. Our study student facing internet connectivity issue is 61% One another study it is found that online teaching can be effective only if good internet service is available everywhere¹⁶. Anatomy teaching is difficult to learn and other factors made them think online teaching is ineffective.

In the present study also the online teaching methods was introduced for the first time and it

was difficult to adjust to the new teaching learning methods from both the students and Teachers side.

Conclusion: The study concludes that online classes were not so effective as students encountered with lot of technical problems, reduced attention span, low motivation and lesser understanding in the concepts of subject thought. Hence measures must be taken to improve online teaching of anatomy for MBBS students. Especially for dissection and defenestration class offline teaching is more effective than online teaching. In terms of the efficiency of distance education in the future, students should focus on self-discipline and self study.

Acknowledgement: All the authors declare that they have participated in the design, execution, and analysis of the paper, and that they have approved the final version. This study does not have any funding.

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Conflict of interest: None

Funding: None

Cite this Article as: Chaudhari M, Vaghela B, Jadav H. A Study On Impact Of Online Education And Traditional Anatomy Teaching On Student. Natl J Integr Res Med 2022; Vol.13(1): 105-108