

ARCHIVES of NIMH



The Official Journal of
National Institute of
Mental Health, Dhaka

ARCHIVES of NIMH

Editorial

Clinical guidelines: benefits and limitations

Review Article

Merits and demerits of online undergraduate medical classes during COVID-19: a narrative review

Original Articles

Pattern of psychiatric disorders among individuals facing the consequences of COVID-19 pandemic and attended in a tertiary care psychiatric hospital

Estimation of C-reactive protein level in schizophrenia

A comparison of the effects of 1.5% glycine and 5% glucose irrigants on plasma serum physiology and the incidence of transurethral resection syndrome during TURP sur-gery

Factors predicting depressive symptoms in patients with chronic kidney disease and end-stage renal failure

Prevalence of anxiety and depression among cancer patients in a community hospital of Bangladesh

Personality disorders among patients of substance use disorders

Case Report

Successful management of Sheehan's syndrome mimicking schizophrenia in a 36 years old female

Editorial

Clinical guidelines: benefits and limitations

Mohammad Tariqul Alam

1-2

Review Article

Merits and demerits of online undergraduate medical classes during COVID-19: a narrative review

Md. Sultan-E-Monzur, Zubair Mahmood Kamal

3-6

Original Articles

Pattern of psychiatric disorders among individuals facing the consequences of COVID-19 pandemic and attended in a tertiary care psychiatric hospital

Bidhan Ranjan Roy Podder, Mohammad Muntasir Maruf, Shabana Parveen, Zinat De Laila, Niaz Mohammad Khan, Farzana Rahman, Zubair Mahmood Kamal

7-13

Estimation of C-reactive protein level in schizophrenia

Mortoza Hassan, Jasmin Akhter, Nazia Afrin Siddiqui

14-18

A comparison of the effects of 1.5% glycine and 5% glucose irrigants on plasma serum physiology and the incidence of transurethral resection syndrome during TURP surgery

Mohammad Haris Uddin, Golam Mawla Chowdhury, Forkan Abmmad, Bishwanath Kundu

19-25

Factors predicting depressive symptoms in patients with chronic kidney disease and end-stage renal failure

Nazia Afrin Siddiqui, Babrul Alam, Mohammad Haris Uddin, Mohammad Afjal Hossain, Md. Asbraful Alam, S M Nafeez Imtiaz, Md. Raquib Morsbed

26-31

Prevalence of anxiety and depression among cancer patients in a community hospital of Bangladesh

Shabina Akhter, Shabeen Islam, Md. Reza-A-Rabby

32-39

Personality disorders among patients of substance use disorders

A.K.M Shafiqul Azam, Ahmed Riad Chowdhury, Ramendra Kumar Singha Royle, Md. Abdul Motin, Md. Mejbaul Khan Forhad, Suchitra Talukdar, Mohammad Tariqul Alam

40-46

Case Report

Successful management of Sheehan's syndrome mimicking schizophrenia in a 36 years old female

Sadia Afrin Shampa, Md. Sultan-E-Monzur, Fabima Sharmin Hossain, Md. Khairul Islam, Muntasir Maruf, Mohammad Tariqul Alam

39-41

Instructions for authors

A4-8

Merits and demerits of online undergraduate medical classes during COVID-19: a narrative review

Md. Sultan - E - Monzur, Zubair Mahmood Kamal

Background: Increased availability of internet services and COVID-19 pandemic have produced a burst in online learning activities. Undergraduate medical students who are the future physicians are core of any health system and their training is traditionally given in face-to-face learning format. Exploring the pros and cons of online learning for undergraduate medical students will help in designing effective teaching and learning approaches.

Objectives: Exploring the perception of teachers and students regarding advantages and limitations of online learning and forming a list of recommendations for increasing effectiveness.

Methods: This narrative review was conducted with available literatures after meticulous search in Medline, Google, Google Scholar and PubMed with the searching keywords. No time limit was instituted. We also searched literatures for the explorations of the perception of teachers and students regarding the advantages and disadvantages of online medical classes during the COVID pandemic.

Results: One of the biggest difficulties for online learning is lack of access to internet and related technologies specially in underdeveloped and developing countries. Feelings of isolation may engross learners. We found that there are advantages like elimination of the cost points of student transportation, student meals and accommodation.

Conclusions: It is not possible for us to avoid this unwanted but very real situations and have to have cope with this practical issue and also should continue the study procedures, there is a need to train faculty on the use of online modalities and developing lesson plan with reduced cognitive load and increased interactivities.

Declaration of interest: None

Copyright and usage: ©Archives of NIMH 2021

Keywords: COVID-19; online classes; e-learning; merits and demerits.

Introduction

The World Health Organization (WHO) has declared COVID-19 both a global public health emergency and a pandemic in March 2020.¹ Spread of COVID-19 has led to the closure of educational institutions including medical colleges all over the world. To continue the educational

activities alternative teaching method for medical students like online learning has been started all over the world. Education has transformed from offline into online mode and online learning has become the commonest delivery method across the world.

Traditional learning happens offline, in a particular schedule and place along with other learners and primary source of information is the lecturer and there is ample opportunity for interaction. During this COVID pandemic, online learning happens online with the aid of different internet-based services; learners can join from any place and time schedule is flexible, primary source of information is online contents and happens with limited interaction opportunity with the teacher and other learners. One of the most used terms after the COVID pandemic is the term “new normal.”² Like other domains this new normal is also implicated for undergraduate medical education.

Pervious concept of education has now become digitalized and named digital learning. Digital learning has emerged as a time demanding and necessary resource for students including undergraduate medical students all over the world. For many educational institutes, this is an entirely new way of education that they have had to adopt. It has extended beyond academic learning to learning extracurricular activities. Digital learning systems are web-based software for distributing, tracking, and managing courses over the Internet.³ It involves the implementation of advancements in technology to direct, design and deliver the learning content, and to facilitate two-way communication between students and faculty.^{3,4} They contain features such as whiteboards, chat rooms, polls, quizzes, discussion forums and surveys that allow instructors and students to communicate online and share course content side by side. These can offer productive and convenient ways to achieve learning goals. Many institutions are using Microsoft Teams, Google meet, Edmodo and Moodle as learning management systems along with their applications for video conferencing.⁵ Other commonly used video conferencing solutions include Zoom, Skype for business, WebEx and Adobe connect etc.

In developing and least developed countries, online learning can mitigate the problem of faculty shortage; expand the reach of medical educators and improve their efficiency. It can improve access to training and facilitate collaboration with institutions having better resources.⁶⁻⁸ Notwithstanding, in survey studies during the COVID-19 pandemic in India,⁹ Pakistan,¹⁰ Nepal,¹¹ Jordan,¹² and Libya,¹³ the majority of medical students had expressed a negative perception and dissatisfaction towards online learning.

Methods

We utilized a modified version of the procedure described by Green and co-workers to conduct the narrative review.¹⁴ The aim was to find published research that explore the perception of teachers and students regarding advantages and limitations of online learning and forming a list of recommendations for increasing effectiveness. This explorative approach included studies describing: a) medical teachers and students’ perception about online learning during COVID b) advantages described by the participants c) limitations described by the participants and d) suggestions for making online learning more effective in undergraduate medical education.

The inclusion criteria were thus purposefully relatively loosely defined. The search terms used included online learning, online classes, digital learning, undergraduate medical students, COVID, etc., in title or abstract, in Medline, Google, Google Scholar and PubMed. The searches were conducted in September 2021. We also separately searched relevant Bangladeshi research journals to see if any work had been published in Bangladesh. These searches were conducted between October 10th and 20th. We only included studies among undergraduate medical student groups.

Results and Discussion

Advantages of online learning

1. Efficiency

Online learning offers teachers an efficient way to deliver lessons to students. There are tools such as videos, Power point, Microsoft words, PDFs, Zoom, Google meet, WhatsApp and teachers can use all these tools as part of their lesson plans. By using the lesson plan beyond traditional textbooks to include online resources, teachers are able to become more efficient educators.

2. Accessibility of time and place

It allows students to attend classes from any location of their choice. More extensive network of students can join, instead of being restricted by geographic location and there is no need for formal attire. Lectures can be recorded, archived, and shared for future reference which allows students to access the learning material at a time of their comfort. In this way, online learning offers students the accessibility of time and place in education.

3. Affordability

Online learning is far more affordable than physical learning as the cost of student transportation, student meals, and accommodation are minimized. Also, all the course or study materials are available online, thus creating a paperless learning environment which is more affordable, while also being beneficial to the environment.

4. Improved student attendance

Since online classes can be taken from home or location of choice, there are fewer chances of students missing out on lessons.

5. Variety of learning styles

Every student learns in a different way and online learning can be personalized. Thus, visual and auditory learners each can use their preferred method. Similarly, some students thrive in the classroom, and other students are solo learners who get distracted by large groups. With its variety of options online learning can provide a perfect learning environment appropriate for each student.

Limitations of online learning

1 Inability to focus on screens

In online classes watching and supervising students are challenging. Students could easily access and get distracted by other online activities. There is also struggle with focusing on the screen for long periods of time. The classes have to be engaging and interactive to keep students' focus.

2 Technology issues

Internet access and connectivity is another key issue. While internet penetration has widened over the past few years, in many places, a consistent connection with decent speed is still a problem. Lack of consistent connection has detrimental effect on learning.

3 Sense of Isolation

Students can learn by watching and interacting with fellow students. In online classes there are minimal interactions and a feeling of isolation can engross students. However, video conferencing can allow face-to-face interaction and reduce sense of isolation.

4 Teacher Training

Teachers need to have basic understanding of using digital platforms and they may need training beforehand which is not always easy. Sometimes, teachers

lack necessary resources and tools to conduct online classes.

5 Problems at home environment

Classroom and home environment are not similar and mental attitudes could be quite different while attending from homes than from classrooms. Also, disturbance in family life or home can distract students.

6 Practical and clinical works

Medical students may face difficulty in doing practical and clinical works. Teachers also couldn't provide immediate feedback to students. Conduction of exams is also problematic.

Medical education requires highly interdisciplinary courses, clinical experience and rapid and ongoing knowledge updates as students seek to become physicians.^{13,15} However, the education can't be segregated from pandemic and social reality. After extensive searching of so many literatures regarding teaching of undergraduate medical students in online we can recommend some valuable tips for the improvement of online teaching methods. We think these tips will help to conduct medical classes in online under pandemic and social restrictions. Tips are as follows:

- 1 An open mind is necessary to adapt to changes and understand the benefits of digital learning.
- 2 Problem solving coping style can be used – which states what can be changed try to change it and what cannot be try to accept it.
- 3 Train teachers about adult learning principles and how to use digital platforms effectively.
- 4 Develop and maintain digital infrastructure which will support the needs for increased capacity during crisis situations.
- 5 Provide funding and logistic support to create educational materials online.
- 6 Develop mental health support system in medical colleges
- 7 Use analytical tools to trace students' learning curves and give appropriate feedback. One mentor could be selected to guide five to ten students.
- 8 Use video and pictures rather than written slides.
- 9 Policy makers should focus in this area and invest in digital learning.

Conclusions

Although there are limitations, several researches support the use of online learning in undergraduate medical and dental colleges. During periods of social restriction and lockdown, online learning modality can be employed in colleges. Good speed internet connection and training of teachers are necessary to make this platform effective.

Md. Sultan-E-Monzur, Former Assistant Professor, Psychiatry, North Bengal Medical College, Sirajganj, Bangladesh; **Zubair Mahmood Kamal**, MD Phase A Resident, NIMH, Dhaka, Bangladesh.

Correspondence: Md. Sultan-E-Monzur, Former Assistant Professor, Psychiatry, North Bengal Medical College, Sirajganj, Bangladesh. Email: semshuvo@gmail.com

How to cite this article: Monzur MS, Kamal ZM. Merits and demerits of online undergraduate medical classes during COVID-19: a narrative review. Arch NIMH. 2021; 4(2): 3-6.

Received 22 July 2021, revised 27 Oct 2021, accepted 15 Nov 2021

References

- World Health Organization. Rolling updates on coronavirus disease (COVID-19). Accessed on 31st July 2021. [Retrieved from <https://www.who.int/emergencies/diseases/novel-coronavirus-2019/events-as-they-happen>]
- Naqvi HA. Mental health in the aftermath of COVID-19: A new normal. J Pak Med Assoc. 2020; 70 (Suppl. 3) (5): S141-S144.
- Kumar SC. Awareness, benefits and challenges of e-learning among the students of Kurukshetra University Kurukshetra: A study. Int J Inf Dissemination Tech. 2019; 8(4): 227–230.
- Keis O, Grab C, Schneider A, Ochsner W. Online or face-to-face instruction? A qualitative study on the electrocardiogram course at the University of Ulm to examine why students choose a particular format. BMC Med Educ. 2017; 17(1): 194.
- Thanji M, Vasantha S. ICT factors influencing consumer adoption of e-commerce offerings for education. Indian J Sci Tech. 2016; 9(32): 1–6.
- Abaid U, Mahmoona A, Shanza A, Sajjad A. Challenges of online learning during the COVID-19 pandemic encountered by students in Pakistan. Pedagog. Soc. & Psych. 2021; 3 (1): 31
- Barbera E, Clara M. Time in e-learning research: a qualitative review of the empirical consideration of time in research into e-learning. ISRN Educ. 2012: 2012.
- Frehywot S, Vovides Y, Talib Z, Mikhail N, Ross H, Wohltjen H, et al. E-learning in medical education in resource constrained low- and middle-income countries. Hum Resour Health. 2013; 11(1): 4–15.
- Singh K, Srivastav S, Bhardwaj A, Dixit A, Misra S. Medical education during the COVID-19 pandemic: a single institution experience. Indian Pediatr. 2020; 57(7): 678–679.
- Abbasi S, Ayoob T, Malik A, Memon SI. Perceptions of students regarding e-learning during Covid-19 at a private medical college. Pak J Med Sci. 2020; 36(COVID19-S4): S57–S61.
- Nepal S, Atreya A, Menezes RG, Joshi RR. Students' perspective on online medical education amidst the COVID-19 pandemic in Nepal. J Nepal Health Res Counc. 2020;18(3):551–555.
- Al-Balas M, Al-Balas HI, Jaber HM, Obeidat K, Al-Balas H, Aborajoo EA, et al. Distance learning in clinical medical education amid COVID-19 pandemic in Jordan: current situation, challenges, and perspectives. BMC Med Educ. 2020; 20(1): 341.
- Alsoufi A, Alsuyihili A, Msherghi A, Elhadi A, Atiyah H, Ashini A, et al. Impact of the COVID-19 pandemic on medical education: medical students' knowledge, attitudes, and practices regarding electronic learning. PLoS ONE. 2020; 15(11): e0242905.
- Green BN, Johnson CD, Adams A. Writing narrative literature reviews for peer-reviewed journals: secrets of the trade. J Chiropr Med. 2006 Autumn; 5(3): 101-117.
- Tallent-Runnels MK, Thomas JA, Lan WY, Cooper S, Ahern TC, Shaw SM, et al. Teaching courses online: A review of the research. Review of Educational Research. 2006; 76(1): 93–135.



The Official Journal of
National Institute of
Mental Health, Dhaka

This journal is approved by
Bangladesh Medical & Dental Council (BM&DC)

This Journal is Published by
National Institute of Mental Health, Dhaka