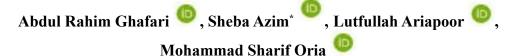
IRSTI 76.01

https://doi.org/10.26577/IAM.2022.v3.i2.04



Kabul medical university, Afghanistan, Kabul

\*e-mail: Sheba2.azim@gmail.com

# SATISFACTION OF DENTISTRY FACULTY STUDENTS OF KABUL UNIVERSITY OF MEDICAL SCIENCES FROM ONLINE LEARNING OF PHYSIOLOGY DURING COVID 19 PANDEMIC AND ITS ADVANTAGES AND DISADVANTAGES FROM THE STUDENT'S POINT OF VIEW

The demand for online and distance education has expanded dramatically around the world since the coronavirus disease 2019 (COVID-19) pandemic in early 2020. The COVID-19 pandemic has disrupted teaching in a variety of institutions, especially in medical schools. Electronic learning (e-learning) became the core method of teaching the curriculum during the pandemic. To evaluate student's satisfaction and to find the advantages versus disadvantages of online learning of physiology subject from student's perceptions during pandemic a qualitative analytical research designed, which carried out in Kabul University of Medical Sciences (KUMS) on sophomore students of stomatology, in this research a self-administered questionnaire was used for collecting data. After 3 weeks of only online teaching, this survey was conducted; data gathered from the survey were analyzed with routine statistical software. 48 sophomore students of stomatology faculty of KUMS answered the questions, which indicated that 72.9% of students were strongly support online learning via Google classroom, and 25% of students were moderately support and 2% of students were not support online learning via GC. And according student's perceptions, avoiding of time wastage, usability of learning material everywhere any time, and learning how to use technology is the advantages of online learning, and low internet speed with high cost, disability of practical works are the disadvantages of online learning of physiology subject.

Keywords: Learning, Online, Google Classroom, Pandemic, Covid-19.

#### Introduction

World Health Organization (WHO) has declared the novel coronavirus (COVID-19) outbreak a global pandemic on March 11, 2020 [1]. The first case was officially recorded, in the Wuhan City of China. Since then it gradually shifted to other part of the world and there has been substantial growth across the globe. The first case of COVID-19 in Afghanistan was stated in the province of Heart in a 35-year-old Afghan citizen who had come back from Iran. CO VID-19 was accountable for 69,130 confirmed case s and 2,881 deaths in the country as of May 28, 202 1These assessments, however, do not appear to correspond to the real rate of disease transmission [2]. Coronavirus pandemic has not only impacted human life but also impacted medical education and residency training all over [2-3]. With principles of social distancing, all face to face classes were suspended due to the ongoing COVID 19 pandemic [4]. According to UNESCO, by the end of April 2020,186 countries have implemented nationwide closures, affecting about 73.8% of the total enrolled learners [5].

Afghanistan government announced on 14 March, that all educational institutes in the country would not open until 21 April. And announced, that lessons would be taught online. Initially educational institutions one after another paid attention to facilitate educational materials for their students by using different applications. Kabul University of Medical Sciences «Abu Ali Ibn Sina» also decided to continue online courses by creating classes in the Google Classroom for different faculties, in order to avoid wasting students' time. Therefore, it is a new teaching method in Kabul University of Medical Sciences; the following research was launched in order to know the level of satisfaction and pros and cons of online learning from students' perspective. Numerous studies show that online teaching method is effective, for example Mohammad Taghi Mohammadi and his colleagues found that online teaching of physiology online is effective and increases students' creativity [6]. In another study which conducted in 2018 by Diane O Doherty and his colleagues found that lack of technical skills, inadequate facilities, lack of specific online teaching strategy and, time constraints

are one of the major obstacles to launching online teaching in medical education [7]. Izwan Nizal and his colleagues in Malaysia found that students were more satisfied with teaching in the Google Classroom. This research was conducted on over 100 students who were taught by using Google classroom application [8]. Lubna Salamat and his colleagues found that online education has no time limitation and they feel relax and enable students to solve problems without the help of others [9]. Leisi Pei and her colleague found that online teaching compared to offline teaching is effective in improving students' knowledge [10].

Objectives

To find students satisfaction from online teaching method using Google classroom;

 To find pros and cons of online teaching method from student point of view;

Major Research questions

- Are students satisfied from online teaching method in physiology?

- What are the pros and cons of teaching online in physiology from student point of view?

## **Material and Methods**

This is a cross sectional study was conducted at Kabul University of Medical Sciences "Abu Ali Ibn Sina" Sample number: Second grad students of dentistry faculty of KUMS, who's joining to Google classroom. N=87

It was a qualitative analytical study, which is done to second grade students of dentistry faculty of Kabul University of Medical Sciences. According to the curriculum of student's cardiovascular physiology has been taught online by using of Google classroom application by sending of videos which created with Camtasia studio 8 and PowerPoint slides. Then a self-administered questionnaire is sent via Google classroom to the students for obtaining data and students response sheet were collected via Email. Data gathered from the survey were analyzed with routine statistical software.

Inclusion criteria second grad students of dentistry faculty of KUMS, who's joining to Google classroom N=87. Expulsion criteria. Students of other grads of Kabul University of Medical Sciences "Abu Ali Ibn Sina"

Major research variables

- Independent variable: online teaching method

- Dependent variable: Students opinion about online teaching method

Research tools and data collection source: The data obtained from students is a primary data and collected from questionnaires.

### Results

In this study 48 students of second grad, dentistry faculty of KUMS were participated. After evaluating and analyzing the questionnaires, which indicated that 72.9% of students were satisfied with the online teaching method via (Google Classroom). And 25 percent of the students are relatively satisfied and 2 percent are not satisfied to learn through online. 91.6% of students were indicated that the quality of the submitted materials (graph 1) were high enough. And 97.9% of students were satisfied from mythology of teaching by their instructor.

Advantage of online teaching method from student's point of view are summarized as follow:

- Preventing time wastage;

- Usage of Google Classroom is easier than other online teaching methods;

- Familiarization of students with advanced technologies;

- Availability of course materials at any time anywhere for students;

- Avoiding of unnecessary consumption like transportation and food;

Asking questions freely from instructors;

*Disadvantage of online teaching method from student's point of view are summarized as follow:* 

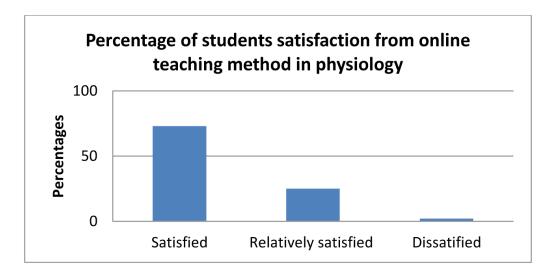
Low speed and high cost of internet;

Disability of practical works;

Disability of instructors to evaluate students properly;

Problems in downloading course materials;

- Time consuming to receive instructors reply;



Graph 1 – Shows the percentage of students' satisfaction from online teaching method in second grad faculty of dentistry KUMS

#### Discussion

Universities are continuously trying to deliver high quality teaching and consistent communication to students during these uncertain times. This new situation will be crucial in the coming times and this survey research has found some of the crucial result which help Universities to develop strategies. Overall the responses were positive towards the online learning. Based on the results yielded by the present study, implementation of online teaching improves knowledge of students and they strongly support online learning of physiology subject. And according students perceptions, Preventing time wastage, Familiarization of students with advanced technologies, Availability of course materials at any time anywhere for students, Avoiding of unnecessary consumption like transportation and food and Asking questions freely from instructors is the advantages of online learning, and low speed and high cost of internet, Disability of practical works, Disability of instructors to evaluate students properly, Problems in downloading course materials and Time consuming to receive instructors reply are the disadvantages of online learning of physiology subjects.

Because Afghanistan is one of those countries whose educational infrastructures is not fully mature, online teaching was faced with some problems, lack of familiarity of teachers and students with technology and the use of educational applications was among problems that fortunately solved as soon as possible.

Internet low speed and high cost was another problem that students faced. Fortunately, students endured this problem with great efforts and continued their studies.

Numerous studies have been conducted on various aspects of online teaching, and found that online teaching of Physiology online is effective and increases students' creativity [6]. Izwan Nizal and his colleagues in Malaysia found that students were more satisfied with teaching in the Google Classroom which was conducted on over 100 students who were taught by using Google classroom application [8]. Another study found that the average score of students who were taught online are higher than the average score of students who were taught by traditional lecture [11].

In fact, that this research shows the result of online teaching only in Physiology subject, which was done on a small number of students, therefore more comprehensive research is needed in this field.

### Conclusion

Based on the results yielded by the present study, implementation of online teaching improves knowledge of students and they strongly support online learning of physiology subject during pandemic. Therefore, executives of education system should consider incorporation of online teaching in teaching-learning processes.

#### References

1. Mousavi, S., et al., The first COVID-19 case in Afghanistan acquired from Iran. The Lancet Infectious Diseases, 2020. 20.

2. Oria, M. S., Wardak, F. R., Rasib, A. R., Pirzad, A. F., Khel, M. I. I., Shefaye, H., & Negin F. (2022). Perceived Stress levels among Anaesthesia and Intensive Care staff during the third wave of the COVID-19 pandemic: A report from Afghanistan. Update in anaesthesia, 36, 86-96.

3. Chick RC, Clifton GT, Peace KM, Propper BW, Hale DF, Alseidi AA, Vreeland TJ. (2020). Using technology to maintain the education of residents during the COVID-19 pandemic. J Surg Educ.

4. Ferrel MN, Ryan JJ. (2020). the impact of COVID-19 on medical education. Cureus; 12:e7492.

5. United Nations Educational, Scientific and Cultural Organization. (2020). COVID-19 educational disruption and response.

6. Mohammdi, MT. Malik, S. Sanisales, Z. (2015). The impact of E- Learning on Creativity and learning in physiology course in Nursing Students of Shahrekord University of Medical Sciences. Future of Medical Education Journal; 5(4): 25-29.

7. Doherty, D. Dromy, M. Lougheed, J. Hannigan, A. Last, J. McGrath, D. (2018). Barriers and solutions to online learning in medical education- an integrative review. BMC Medical Education;18 (130).

8. Nizal, I. Jastani, MJ. Samimi, S. (2016). The Application of Google Classroom as Tool for Teaching and Learning. Journal of Telecommunication, Electronic and Computer Engineering; 8(10). e- ISSN:2289-8131

9. Salamat L, Ahmad G, Bakht MI, Saifi IL. Effects of e-learning on students' academic learning at university level. Asian Innovative Journal of Social Sciences and Humanities. 2018 Apr;2(2):1-2.

10. Pei, L. Hongbin, Wu. (2019) Does online learning work better than offlinelearning in undergraduate medical education. A systematic review and meta-analysis, Medical Education Online, 24:1, 1666538, DOI: 10.1080/10872981.2019.1666538

11. Elfaki NK, Abdulraheem I, Abdulrahim R. Impact of e-learning vs traditional learning on student's performance and attitude. International Journal of Medical Research & Health Sciences. 2019 Dec; 8(10):76-82.