# **Original Article**

# THE PERSPECTIVE OF MEDICAL STUDENTS OF A PRIVATE MEDICAL COLLEGE IN LAHORE ABOUT THE ONLINE TEACHING

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#### **ABSTRACT**

Background: To know the general opinion of medical students of a private medical college of Lahore about online teaching.

Material and Methods: A descriptive cross-sectional qualitative survey was conducted in Akhtar Saeed Medical and Dental College, Lahore. The duration of the study was one month, from 1st March 2021 to 30th March 2021. A survey questionnaire was formed and sent to all MBBS students of 3rd year and 4th year of Akhter Saeed Medical and Dental college. It consisted of 15 questions. Online survey methodology was used and an online google survey was generated and sent to all students of two classes. Non-probability conventional sampling method was used. All students, who have been promoted to 3<sup>rd</sup> and 4<sup>th</sup> year after 2<sup>nd</sup> and 3<sup>rd</sup> professional examinations respectively, were included in the study. The students who did not respond within a month and those who detained were excluded from the study. The online survey was sent to two hundred and seventy-six (276) students, the response was collected for 232 (79%) students and analyzed by SPSS 20.

Results: The results were presented in form of pie charts. The most favorite online teaching mode was zoom (87.5%) and WhatsApp (76.3%). Among total, 79.3% students had difficulty in understanding study material online, 76% of students were not satisfied with their online teaching and 84% believed that they had not been competent diction with online teaching.

Conclusion: Online teaching has evolved as a new mode of teaching during the corona pandemic. Although it has helped us a lot in restoring the continuity of medical education but still majority of students are not satisfied with this method. There is no comparison with actual physical teaching, but it is a need for the time to evolve more interactive and iterative techniques for online classes to achieve learning objectives.

**Key Words:** Pandemic, Medical Education, Medical Students

## INTRODUCTION

Some of the major epidemics of world in history were Plague<sup>1</sup> in (165AD) & (1346-1353), Cholera pandemic (1852-1860) & (1910-1911), Flu epidemic<sup>2,3</sup> (1889-1890), (1956-1958) & then in 1918 and small pox<sup>4</sup> in 1972. After world war I (1914-1918), discovery of Antibiotics penicillin in 1928 was revolutionary and no major pandemic outbreak with massive destruction was observed.

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Afterward, the world has been in its usual course of "progress" when a sudden halt is observed in the health sector with HIV in 1980.<sup>5,6</sup> Research in antiviral drugs is one of the progressive and flourishing fields still. Then came the month of December 2019. when in Wuhan city of Hubei province of China, <sup>7-9</sup> a fatal respiratory distress syndrome was identified and got the attention of the whole world. The practical meaning of the term "lockdown" was obvious in the whole world without discrimination of developed and developing countries. There were restrictions on the land and in the air. This has shifted the world from real to virtual, from offices to work from home, and from physical to online.

Unlike other progressive study fields like agriculture, architecture and design, business,

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law, engineering and technology, medical education is unique because it deals with the human body. Anatomy is a very basic subject of medical education which deals with the study of the human body. The real cadaver and specimens are used physically to teach medical students about human bodies since the 3<sup>rd</sup> century B.C when two Greeks performed the first dissections of human cadavers. But now a days due to restrictions imposed by Govt. of Pakistan, we had to shift to online classes. Everyone is putting his or her effort into making a better teaching schedule, but student satisfaction is still not achieved.

# MATERIAL AND METHODS

A questionnaire was developed keeping in view different aspects of online teaching methods. It consisted of fifteen (15) questions that were sent to MBBS students, of 3<sup>rd</sup> year and 4th year. These were because they have experienced both physical as well as virtual classes. Online survey methodology and online google survey were generated and sent to all students of two classes. Non-probability convenience sampling method was used. All students who have been promoted to the next class after the 2<sup>nd</sup> and 3<sup>rd</sup> professional examinations were included in the study. The detained students were excluded from the study. The questionnaire was sent to 276 students of 3<sup>rd</sup> year and 4<sup>th</sup> year MBBS and got a response from 232 (84%) students. The interview-based data collection technique was also formulated for those who had some problems filling the form online. The data collected was entered in SPSS version 20. The frequency tables were generated and qualitative variables were presented in form of graphs and pie charts.

#### RESULTS

The most favorite mode for online teaching was zoom 87.5%, what's app 76.3%, and google meet 34.5%. out of 232, 79.3% had difficulty in understanding study material online as compared to physical classes. The most common hindrances were poor internet signal strength, faced by 69%, 10% had

issues of unavailability of internet and 7.1% had problems of a power failure and load shedding. The most significant drawbacks of online classes pointed out by students were the lesser level of learning compared with physical class (38.8%), less interactive (22.4%), promoting laziness and idleness (20.7%) and less degree of competency (8.2%) (Fig 1). The most important advantages from the student perspective were no need, of traveling & dress up (34.1%), no restriction of place (32.8%), easy copying in the online exam (13.4%), lame excuses were easy to make (8%) and easy cheating in the exam (4%) (Fig 2).

According to 91% of students, routine physical classes were their preferred choice and 9 % chose online classes (Fig 3). Out of total, 78% of students had the opinion that online examination is not a fair exam. Out of 232, 76% were not satisfied with their online teaching whereas 24 % were fine with it and 79.7% thought that their interaction and communication with their class fellows were compromised but 20.3% had a different opinion. (While answering the question about their competency as knowledgeable doctors 84.1% believed that they will not be competent doctors if online teaching continued but 15.9% were satisfied (Fig 5). Parent satisfaction level with online classes was seen in 24.1% but 75.9% were not fine with it (Fig 4).)

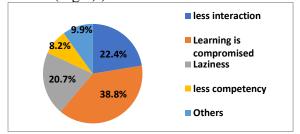


Fig-1: Drawbacks of online teaching

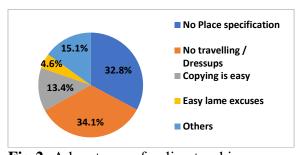


Fig-2: Advantages of online teaching

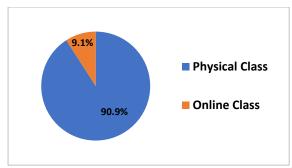
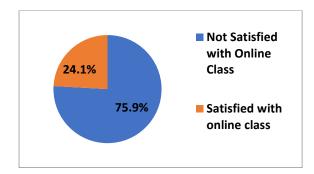
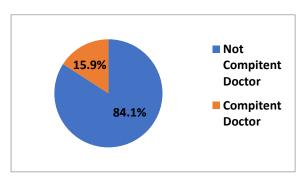


Fig-3: Preferred Choice of teaching



**Fig-4:** Parents Satisfaction with online classes



**Fig-5:** Competency as Doctor having online teaching

## **DISCUSSION**

In Pakistan, till 17th April 2021, there are 750.158 confirmed cases<sup>10</sup> of corona positive, out of which 264,010 cases are from Punjab. The number of reported deaths is health-providing 16,094 including professionals like doctors and paramedic staff. The 3<sup>rd</sup> wave of the pandemic has impose Government to forced lockdowns, rescheduling market timings, closing of schools, colleges, universities & marriage halls, restricting public transport, and banning gatherings of any type. Our medical colleges and their associated

hospitals are overburdened. The teaching faculty of medical colleges are compelled to continue online classes as physical classes are not possible due to the grave health situation at present in Pakistan.

Learning is a complex process. There is a number of theories<sup>11</sup> describing the factors affecting learning. The acquiring of knowledge is one aspect and its application and manifestation in attitudes and skills is an entirely different reality. For a medical student, gaining knowledge and then its practical application for betterment and treatment of the human body, both are mandatory, while adopting virtual classes is particularly significant.

There are different methods adopted by different college administrations for online teaching<sup>12-15</sup> including Zoom, Google meets, WhatsApp, youtube, etc. The three widely accepted methods for online classes are WhatsApp, zoom, and Youtube. The What's app is a famous application created by Brian Anton and Jan Koom in America. Initially messaging used for instant through smartphones, this application allows images, videos, live calls, and audio recording using an internet connection. Acquired by Google for 1 billion dollars in April 2013, what's app claims 400 million active users worldwide. It holds a well-anchored position among messaging applications as it is a free application, easy to use, and allows group formation. The information and knowledge are easily shared through this medium<sup>16-24</sup> inside and outside the country. The shared material can also be saved to review and revise later even when offline. On the other hand, zoom provides face recognition, face to communication. The zoom<sup>16-17</sup> application works well in the initial 40 minutes if the unpaid version is used which needs reconnection later, while this is not the issue with the paid version. Youtube has wide information almost on every topic. It's a good medium to share information but it works only with a good internet facility.

The advantages of these media are that these are user-friendly, convenient, and don't need any specific skills as most youngsters are

already using what's app. The recorded lectures can also be added on WhatsApp and youtube. The students can also use these media on their mobile phones adding to its suitability.

The advantages of these digital media are many, but these are not superior to a physical class. Although these are great adjunctive, these don't replace "REAL" on-ground classes. Lectures are no longer considered as the main media to transfer knowledge, but small group discussions<sup>25</sup> are the most effective source of knowledge sharing where a tutor or supervisor channelizes the discussion to focus on certain points. There are different disadvantages of these media like these promote laziness, it's easy for surfers to focus on unnecessary information and lose the main subject and there is increased screen timing with no physical movement having undesirable physical and visual side effects.

As the students of a private medical college need good economic resources, mostly beared by their parents but online teaching is not a satisfactory source of teaching according to their parents due to various reasons.

It's better to have strategies to adapt according to circumstances for better survival and stability but it should be emphasized that we need to evolve better techniques for online classes with minimal drawbacks, meeting the requirements of students, their parents, and teachers.

## **CONCLUSION**

Online teaching has evolved as a new mode of teaching during the corona pandemic. It was not acquired as an option, but it was necessary to pursue tutoring and tuition. Although it has helped us a lot in restoring the continuity of medical education but still majority of students are not satisfied with this method. There is no comparison with actual physical teaching, but it is a need for time to evolve more interactive and iterative techniques for online classes to achieve learning objectives.

## **AUTHOR'S CONTRIBUTION**

SR: Writing article and data collection

ST: Literature review

MTK: Concept of study and Review ZIB: Review and Proof reading

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