

## Online Higher Education during Covid-19 Pandemic in Bangladesh: Benefits, Problems and Prospects

Md. Awal Hossain Mollah<sup>1\*</sup>, Dr. Mst. Shakila Parvin<sup>2</sup>

<sup>1</sup>*Professor and Ex-Chair, Department of Public Administration, University of Rajshahi, Rajshahi-6205, Bangladesh*

<sup>2</sup>*Assistant Professor of Pharmacology, Kushtia Medical College, Kushtia-7000, Bangladesh*

**\*Corresponding Author:** Md. Awal Hossain Mollah, Professor and Ex-Chair, Department of Public Administration, University of Rajshahi, Rajshahi-6205, Bangladesh

### ABSTRACT

A nation is recognized by the world for its education, science, technology, socio-economic conditions and so many things like these. However, education is one of the vital indicators that has been lockdown during the COVID-19 pandemic globally for primary to higher education and Bangladesh is not out of this. Finding no other alternative, the online education system has been introduced by internet-based video classes like zoom, Facebook, Google class, and many others like these. Though higher education is very important and mainly based on classroom, lab tests, and field visits but during this pandemic, due to lockdown it has been continuing by the online system. Rajshahi University has started online classes via zoom since July 2020. However, several benefits, problems, and few prospects have been found in this study. The crucial finding of this study is online classes are not fruitful for a long time as higher education is highly technical, professional, and specialized and based on a practical, lab test, and field survey. However, for a temporary period, it is moderately helpful for students. If prolong pandemic stay, higher education including all kinds of education will hamper and session jams will appear throughout the world which would be harmful to the global education, economy, governance, health, safety, and peaceful world.

**Keywords:** Higher Education, Internet, Video Conference, Zoom, Bangladesh.

### INTRODUCTION

The pandemic of COVID-19 has severely disordered all tiers of education globally and Bangladesh is not out of this situation. According to the academic and health scholars, the impact of a pandemic would be a long term impact on education sectors as no educational institutions start online classes before the first week of July due to lack of good-quality internet access, devices, and infrastructure for online classes (Wadud, 2020). COVID-19 pandemic has locked the education systems globally affecting nearly 1.6 billion learners in more than 200 countries of the world (Khanom et al, 2020). The government ordered to close all educational institutions on 16 March but continuing till the date of December 26, 2020, including all types of campus residence halls and dormitories, and students were asked to return home (Wadud, 2020). The sudden shutdown of educational institutions has impacted 94 percent of the world's student population, up to 99 percent in low and lower-middle-income countries (UN, 2020). Therefore, online education was introduced

as an alternative to traditional offline or classroom-based education. Online education is an educational system where information technologies and communications are used for the acquisition of knowledge from remote locations (Anwar & Adnan, 2020). Online education is governed by using internet-based video, audio, text communications as well as software to create the learning environment. This is also known as a virtual class, e-learning, distance learning, etc. Online education replaces the traditional classroom of blackboard, whiteboard, and projectors based education into a virtual environment (Basilaia & Kvavadze, 2020). However, moving smoothly from a conventional educational environment to a virtual platform is not an easy task overnight. However, the massive efforts made by many institutions in a short time proved that change is possible (Haung et al, 2020; Nantha & Maheswari, 2011).

The online class has introduced a major focus in the education system of Bangladesh like other countries. However, virtual teaching-learning

had been a new experience in almost all universities in Bangladesh; sudden closures of the face-to-face class gave the least opportunity to both the faculty and students to get adopted with the new option of virtual class and classroom. The current paper has prepared based on a web-based questionnaire survey, and the author's personal observation via online zoom meeting conversation (video and audio) while taking classes of both Honors and Masters Students of Public Administration at the Rajshahi University of Bangladesh. The paper deals with the problems, benefits, and prospects of online classes in Bangladesh during the period of a pandemic.

### BACKGROUND AND EXISTING LITERATURE

COVID-19 pandemic is a global reality of the year 2020 that had ceased the educational activities during the beginning of the lockdown phase worldwide (Nahreen et al, 2020). The study is an attempt to address the reality of higher education during the COVID-19 pandemic in Bangladesh. However, most of the educational institutions all over the world already broke the spell of the initial perception and inertia due to the pandemic and resumed their academic activities through online platforms (Nahreen et al, 2020). The students are all the more joining eagerly in online semesters with higher retention rates, finding the e-learning process as a greener option with learning and assessment progressing with reduced distractions and with less of a time investment as commuting is not a requirement. Furthermore, online platforms provide quite a flexible and all-inclusive opportunity with additional guidance and tutoring support from the instructors. Studies have already demonstrated that the online mode of teaching will enable the universities to teach 15-18% additional students at the same cost (Nahreen et al, 2020).

Bangladesh is one of the most densely populated countries in the world with nearly 160 million people within an area of 147,570 square kilometers. Its vast population would be the major resource of the country (Islam et al, 2006). However, transforming the potential people into a productive force and ensuring a dynamic environment for social, economic, and political development is still a big challenge for its government. Though the literacy rate is officially said to be 66%, according to a private survey the rate is only 42%. Education, therefore, has been recognized as a priority sector by all governments since its independence in

1971 (Islam et al, 2006). Today, digital information is everywhere and available to almost everyone. In this era of information technology, medical education is now confronted with novel challenges. Most of the Private Universities in Bangladesh operate in a trimester schedule which offers lesser leeway and flexibility to transit over to a new model of teaching or system in a wider timescale. Accordingly, being midway between the semesters, most had to switch to an online platform immediately for completing the semester and faced huge difficulty due to lack of experience in it (Islam et al, 2006). Moreover, online healthcare information is continually challenging students to rapidly update and expand their existing body of knowledge. Besides, the informatics competency requirements of healthcare technology, such as utilizing electronic healthcare records, learning systems, and aided-diagnosis systems, also present a new challenge for students and teachers.

To prepare qualified graduates for the critical environment in which the internet provides ubiquitous digital information, the teaching methods used for educating and training university students should be reconsidered (Thomson, 2013). Offline learning, or traditional classroom teaching, represents teaching in the pre-internet era. Although some forms of information technology have already been utilized to assist instruction, traditional teaching methods required that teaching and learning should take place at the same time and place (British Council, 2020). Online learning, also called internet-based learning or web-based learning, does not have the time and space limitations, and therefore, makes teaching and learning separable via internet-based information delivery systems. Both online and offline teaching has been widely used in higher education. The use of online learning has vastly increased since 2012, as evidenced by the thriving of massive open online courses (Daniel, 2012).

However, evaluating the effectiveness of online and offline teaching remains difficult. Evaluations have failed to reach consistent conclusions (Cook, 2008; Bartley, 2004) resulting in complex decisions when selecting a teaching method for higher education. The effectiveness of online learning is influenced by many factors. Some factors create barriers for online learning, such as administrative issues, social interaction, academic skills, technical skills, learner motivation, time and support for studies, technical problems, cost, and access to

the internet (Mulenberg & Berge, 2005). Other factors could result in low-quality online learning, for example, an ineffective design and arrangement of multimedia materials (Mayer, 2002). The effective analysis of online and offline teaching in higher education, therefore, should depend on a comprehensive consideration of how they are used across groups. It should all be assessed including the learning goals, design properties of the learning materials, evaluation of learning outcomes, etc. This paper focused on online higher education during the COVID-19 pandemic crisis in Bangladesh.

**METHODS AND TECHNIQUES OF DATA COLLECTION**

This is a qualitative case study focused on Bangladesh based on both primary and secondary data. It is a questionnaire-based observational study conducted on Honors and Masters Students of Rajshahi University, Bangladesh. The study period was from August to October 2020. The classes were conducted by vsession. bdren.net.bd zoom video meeting provided by the university grants commissions (UGC), which capable to count attendance involuntary. Therefore, class percentage (%) of attendance has been counted easily. The questionnaire was both close and open-ended. The answer options were yes/no, and then why yes or no? 100

(50+50) students of BSS Honors 4th year and MSS in Public Administration were selected purposively as the author has direct involvement as a course teacher. Besides, the author has an opportunity to observe them closely and realize their problems and opportunities as an observer and meeting host while taking online classes. The secondary data were collected from review of literature like published journal articles, newspaper reports, and online publications through internet browsing.

**DATA PRESENTATION AND ANALYSIS**

There are several methods and techniques in the presentation of data for qualitative research. In this study, collected data have been presented by using a single table only. Similarly, numerous scholars mentioned various methods and tools for qualitative data analysis. However, three main techniques have been found common for qualitative data analysis (Bryman, 2012:564-588) - Thematic Analysis, Content Analysis, and Narrative Analysis. In this study, the narrative discussion has been conducted as this method is used to analyze content from various sources, such as interviews of respondents, surveys, or observations from the field (Bryman, 2012: 564-588). Table 1 represents the collected data from the respondents.

**Table1.** Presentation of data collected from the respondents

Questions	Types of Response (Total respondents 51)			
	Yes		No	
	(%)	Remarks Why yes?	(%)	Remarks Why No?
1. Do you find any benefits of online education?	42(42%)	1. Students can attend online classes from any location of the world; 2.Social and physical distance maintain is possible; 3.Theoretical class has completed; 4.Online learning offers teachers an efficient way to deliver lessons to students; 5.Online education is keeping students busy as a result they are not affected by depression; 6. Online classes are always better than no classes at all; 7. Online classes reduce financial costs.	58(58%)	Lack of devices and internet problem, most of the students were absent in classes. Therefore, they did not find any advantages.
2. Do you face any problems in online education?	82(82%)	1.Lack of schedule for regular class; 2. Inability to focus on screens for long time; 3. Unavailable of internet in rural areas, interruption of internet due to lack of and poor broad band internet;	18(18%)	No response

		<p>5. Lack of electronic devices (Laptop, computer, and Smart Phone).</p> <p>6. Lack of electricity, frequent shutdown of electricity, less class attendance;</p> <p>7. Practical, lab and field visit is not possible;</p> <p>8. Lack of adequate training and expertise of teachers.</p>		
3. Have any prospect of online education?	30(30%)	<p>1. Online education is very crucial to stay students busy and it would be less expensive.</p> <p>2. It will help students to keep them in academic track.</p> <p>3. Engagement of online education can free from psychological trauma.</p>	70(70%)	Find no prospect

**RESULT AND DISCUSSION**

The Major findings and results of this study are online education is helpful for students like it is better than no education. Theoretical classes and completion of courses are possible to conduct by maintaining social and physical distance but practical, field visits, written exams, and face to face interaction of teachers and students are impossible. Therefore, real education is hampered and session jams appear. Besides, there are several crises and problems like internet problem, lack of ICT based devices, poor network, and lack of skills and facilities of online medical education found in this study.

Table 1 indicates represents the responses of respondents about three basic questions of online higher education during the COVID-19 pandemic. In response to the question of benefits of online higher education, only 42(42%) out of 100(100%) respondents gave their opinions that there are some benefits of online education, for instance, it is possible to attend online class without a classroom; through online system social and physical distance maintain is possible; theoretical classes and the syllabus can be completed; online higher education is keeping students busy as a result they are not affected by depression; online classes are always better than no classes at all because they got some basic ideas and guidelines about their courses. It also reduces the regular cost of overall education cost. However, 58(58%) respondents say online education is not beneficial for them and learning research-based higher education is not possible due to lack of devices and internet problems, most of the students were absent in classes. Therefore, they did not find any advantages.

On the other hand, in response to the question of problems of online higher education, 82% of respondents gave their opinions that they have suffered a lot to attend and complete their courses via the online education system. According to them, major problems are: to manage the schedule for all the courses is very tough as it uses by a specific online system like zoom or Google class so at a time very few teachers can engage in this system due to lack of strong network and internet speed. Similarly, interruption of the internet due to lack of and poor broadband internet most of the students could not stay connected and listen to the whole class even teachers also disconnected several times during class time. Most of the students are from rural areas of Bangladesh and they have no internet facilities and electronic devices (laptop, computer, and Smartphone). Therefore, the attendance of students is less than in the offline classroom. Finally, some more important issues like a practical, lab test, written exam, and field visit are not possible. Therefore, real learning is hampered which is a big threat for a nation like Bangladesh. In response to this question, 18% of students have no response.

The last question was the prospects of online medical education. In response to this question, only 30% of students think online higher education has some prospects but not beneficial for the long-term. They think online education has become a new normal. Nobody knows when exactly all the educational institutions will open. It will help students to advance their academic progress. Psychological trauma can be removed due to online education during the COVID-19 period. However, 70% of respondents think there are no prospects in online higher education.

Besides, several threats and problems may appear which have been mentioned by the Time

Magazine reports. The report mentioned that more screen time is linked to poorer progress on key developmental measures such as communication skills, problem-solving, and social interactions among young generations. It is undeniable that the fewer soft-skills students have, the less they are likely to be hired by the employers of prestigious organizations, failing in professional life (The Dhaka Tribune, 2020). Similarly, a study conducted by the National Centre for Bio-technology Information reveals that spending six hours or more a day watching TV or using computers is associated with a higher risk for depression (The Dhaka Tribune, 2020). Apart from that, scientific research suggests that excessive screen time results in obesity, blurred vision, chronic neck and back pain, coupled with a loss of cognitive ability.

As the crisis prolongs the socio-economic impacts stemming from Covid-19 will have long-term consequences. The lifetime income and productivity would be severely constrained if the government does not step in with bolstered short-term and long-term public policies as follows (Mahtab, 2020).

First, when opening up the educational institution healthcare protocols should be strictly followed prescribed by WHO. Second, ensuring a return to medical for each student's existing stipend programs, exploring the options for 'education loans', communication campaigns, active engagement with families in distress, etc. should be prioritized. Steps should be taken to reduce the digital divides across income groups as well as across regions. Last, but most importantly, the government must increase allocation in education. Bangladesh's expenditure in education, both as a percentage of Gross Domestic Product (GDP) and as a percentage of total tax revenue is one of the lowest in the world. In 2016, Bangladesh spent around 1.5 percent of its GDP on education.

### CONCLUSION

The online classes for higher education during the COVID-19 pandemic situation are a positive and noble initiative within limitations. However, it also felt that such classes cannot be a replacement of classroom teaching for a long time as higher education is mainly based on practical, lab tests, field visits, professional and highly specialized. In this study, according to the observation of faculty and students' opinions live online classes for students can be concluded only for the interim emergency period and it is not fruitful for real higher education. Though some benefits have found several limitations have also

been found which hampered the attendance of students. According to one of the reports published in The Washington Post, prolonged sitting in front of computers or Smartphone is dangerous and is associated with a significantly higher risk of heart disease, diabetes, obesity, cancer, and depression, as well as muscle and joint problems (The Dhaka Tribune, 2020).

Similarly, Harvard Medical School researchers have shown that excessive use of computers or smart phones emitting blue lights can disrupt sleep patterns by suppressing the secretion of the hormone melatonin (Nahreen, 2020) If the COVID-19 pandemic continues for a long time the global education, health, economy, law and order, and smooth governance will be severely hampered. Therefore, people should maintain and follow health guidelines and the government should take effective steps to buy or produce a vaccine to prevent and protect people from COVID-19. Similarly, Harvard Medical School researchers have shown that excessive use of computers or Smartphones emitting blue lights can disrupt sleep patterns by suppressing the secretion of the hormone melatonin (The Dhaka Tribune, 2020). If the COVID-19 pandemic continues for a long time the global education, health, economy, law and order, and smooth governance will be severely hampered. Therefore, people should maintain and follow health guidelines and the government should take effective steps to buy or produce a vaccine to prevent and protect people from COVID-19.

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**Citation:** Md. Awal Hossain Mollah, Dr. Mst. Shakila Parvin, “Online Higher Education during Covid-19 Pandemic in Bangladesh: Benefits, Problems and Prospects”, *Journal of International Politics* 2020, 2(4), pp. 23-28.

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