



## Coronavirus Disease and its Impact on Virtual Education: A Review

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### Abstract

A novel coronavirus named Covid-19 spread worldwide from China which disrupted global interaction with the countries, thus closing different regions and borders. This impacted all the sectors. This review briefed the virtual teaching system during pandemic situation and challenges of this teaching system. In academia sector, efforts are required by educational communities to adopt virtual learning and training practices with continuous hygienic practices. This type of virtual learning environment increases communication and interpersonal skills in society. As compared to theoretical studies, virtual education gives students a profound learning experience enabling students to feel connected and engaged to the learning strategies. [*Bangladesh Journal of Infectious Diseases*, April 2022;9(suppl\_1):S58-S60]

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### Introduction

In early 2020, a novel coronavirus (Covid-19) rapidly spread from China, and unlike previous coronaviruses which are spread in specific geographical areas such as MERS in the Middle East and SARS in North Asia, this SARS-COV2 spread worldwide<sup>1-2</sup>. Hence to control the spread of this pandemic disease, different countries closed borders to other states<sup>3</sup>. As a result of this pandemic, in the educational sector, most universities moved their teaching activities to an online format<sup>4</sup>. Before the worldwide pandemic

crisis, learning and working from home was considered an alternate option and a luxury. About 100 years ago, the last major worldwide health crisis occurred with the 1918-1920 Spanish flu pandemic because of this, various countries adopted new health and working conditions<sup>5</sup>.

A precautionary measure to control the COVID-19 pandemic is the suspension of campus classes and adopt virtual education which is a modification and blend of campus and online approaches. This virtual education and training strategy is also adopted in the health sector such as in nursing practice

specifically addressing hygienic practice during Covid-19<sup>6</sup>. Virtual classroom education is conducted by nursing educators in three different steps which include planning appropriate tasks, selecting essential resources and performing effective delivery<sup>7</sup>. This pandemic situation enabled educators and the academic sector to reorganize teaching methodologies according to current digital technologies which can be easily accessed in a timely manner.

### Virtual Education in Covid-19

During the outbreak of Covid-19, more than 1.6 billion students were affected worldwide<sup>8</sup>. The Covid-19 crisis has simultaneously affected the social, health, economic and education sector. The academic sector has received limited attention in crisis management which is due to the lack of existing knowledge on educational innovation because the previous crisis being confined to a specific geographic area rather than spreading worldwide. Hence, coordinated effort by university communities is required take advantage of this change and adapt to a digital and virtual learning environment<sup>9</sup>. Although there is rise in digital and virtual practices and skills for virtual training in academia, there is a negative perspective in media about the online education system during this pandemic<sup>10</sup>. Hence, to handle such a crisis, educators have to be creative thus providing an opportunity to change their present status in society<sup>11</sup>. Moreover, knowledge transformed virtually in a digital form is easily accessible in a timely manner. The outcomes of this digital learning system are yet to be completely understood and assessment of this digital learning system will provide guidance to students, educators and policymakers about building a prompt response to such a pandemic<sup>12</sup>.

### Impact of Covid-19 on Higher Education

Higher education in universities plays a pivotal role in improving quality of life by promoting social well-being by enhancing communications of people in a community. Universities need to stay adaptive and alert because of the Covid-19 pandemic. Many universities have shut down and mandated work activities from home. During Covid-19 lockdown and work activities from home, there is a reduction in physical interaction between teacher and student which impacted socialization strategies utilized in the classroom. In such pandemic situation, universities need to be considered entrepreneurial which will help to overcome the financial crisis

caused by the Covid-19 pandemic, hence the academia sector may achieve its set goals<sup>13</sup>.

### Challenges in Educational Sector

The worldwide transition of teaching strategies to virtual format was unplanned because both students and teachers did not have much time for the transition from face-to-face to online education. This created difficulty in engaging students while maintaining similar interaction with students as done in face-to-face communication in the class<sup>14</sup>. Although the online teaching system and its sustainability in long run is a major challenge, on the other hand, this system of teaching also provided a chance to flourish in academic innovation. New teaching practices and innovations need to be adopted in universities in this pandemic situation which involve coordination amongst members of the university. Universities engaged in such technology transfer need to be focused specifically on how to overcome this pandemic situation. Through such technological transfer and practical learning experience of the students, they can develop learning attributes such as problem-solving skills and critical thinking, hence building their knowledge repository<sup>15</sup>. To ensure an effective online program, along with online classes, students must have sound computer and technological skills to be utilized in virtual learning<sup>16</sup>.

### Conclusion

This review provided the effect of covid-19 in educational sector. This presents the academia sector with an opportunity to incorporate more innovation and creativity into educational experiences, thus facilitating the transition to digital technology. It is hoped that this review will be helpful to incorporate an entrepreneurial education experience during the Covid-19 crisis.

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