The Impact of COVID-19 on Education in Developing Countries

Alifu Abulikemu*

Department of Biological Sciences, University of California - Davis, Davis, United States
* Corresponding Author Email: aabulikemu@ucdavis.edu

Abstract. Since COVID-19 became pandemic, it has been affecting the global education. The situation is more severe for developing and low-income countries in terms of educational problems. Although students at younger age shows mild or no symptoms of COVID-19, children, and college students in developing countries have a hard time in learning under the influence of the virus. It is essential for the rest of the world to provide support to the developing countries to back on the tracks of providing normal education for children and students, especially for those who are from the poorest families.

Keywords: COVID-19, SARS-CoV-2, Education, Developing Countries.

1. Introduction

COVID-19 can be referred to as "SARS-CoV2" which stands for severe acute respiratory syndrome coronavirus 2 and named by the World Health Organization as "coronavirus disease 2019" referring to the pneumonia caused by the novel coronavirus 2019 infection [1]. It has impacted the worldwide education since it became pandemic, especially for developing countries and low-to medium-income countries. Online distance learning is widely used in the world as a solution to reduce the impact on education caused by COVID-19. However, low-income and developing countries are not able to widely provide distance learning to the whole nation due to economic and technological difficulties. Instead of providing the whole nation with devices and platforms for online learning which is beyond the economic ability of some developing countries, television or radio education are used by developing countries, although some of the poorest families in these countries still cannot afford television or radios [2]. Aside from economic and technological problems, wellbeing and mental health of students also need to be concerned. In this essay, the impact of COVID-19 on the education of developing countries, the difficulties faced by these countries, and future possible solutions to continue education and opportunities are discussed.

2. COVID-19 and its impact on the worldwide education system

Online learning has been the most efficient way to cope with the effect of COVID-19 has on worldwide education. However, online teaching cannot suit all subjects or faculties. Although faculty members get trained to deliver classes on an online platform, it can be difficult for certain teachers or professors to master the modern technology. Furthermore, working from their home instead from the office can be more difficult due to the fact that it is difficult for teachers to get help encountering technical problems [3]. The effect of COVID-19 can be more severe for international students. Since the campus is closed to slow down the spread of the virus, international students cannot get help or benefit from most of the school facilities. Providing basic living need like food for students is a challenge for school administrators considering the possibility of virus spread [4]. Whether staying on campus under the risk of virus or going back to their home countries considering the possibility of infecting the disease on the trip is a hard decision for international students to make. These effects brought by COVID-19 might affect the admission of international students for their next semester [5]. Mental health has to be considered for both school faculty member and students including their family. For international students that choose to stay at school, the wellbeing of their family members can be their great concern. Not only they have to focus on their studies through online learning, but they are also worried about their families [6].
According to studies that were done by Engzell and his colleges, it is shown that even for Netherlands which had a relatively short school closure, there is still a 3 percent learning loss. Students from less educated families show a higher 60 percent of learning loss, raising concerns about the uneven impact brought by the pandemic on students and their families with poor financial ability [1]. The results show that home-schooled students barely make no progress when they were studying at home instead of face-to-face studying. Losses are greater in countries that have schools with less developed infrastructure or longer school shutdown [1]. The 2019 coronavirus disease pandemic affected nearly 70% of children and adolescents around the world due to school closure policies. Schools have closed to reduce the spread of the virus [7].

However, as more research shows, most infections in children are mild or asymptomatic. Based on the studies that were done by Nikolopoulou and Maltezou, nearly 50 percent of children that are tested positive for COVID-19 do not show any symptoms [8]. For children, it is less risky for them to develop symptoms that can threat their lives.

As schools remain closed, the threat to education and malnutrition among students is even more serious. In some low-income countries, a large proportion of students rely on the lunch program provided by their schools to get necessary nutrients for children and adolescents, but because of the suspension of classes, the program is terminated, and the progress of students’ education is stagnated [7].

3. Challenges faced by education in developing countries

In most of the developing and low-income countries, the economic crisis took place first due to the fact that governments have shut down the economy for the rate of infection to decrease. Correspondingly, developing countries are experiencing the biggest economic downturn as well as the closure of education and transportation systems [9]. School closures have created worse situations for students, their families, and faculty members, and these impacts greatly exacerbated in those developing countries. In particular, students from the poorest families with lower education levels and children with poor learning motivation suffered the most during the epidemic [9]. Additionally, younger children are more affected by school closures than older kids since they rely more on their parents. Guidance in the learning process is essential for them, as well as good internet access, and ability to apply digital devices and applications.

Students from low-income families may find it incredibly difficult to learn when they have limited access to technology or inconsistent internet connectivity. [2]. In addition, e-learning cannot guarantee that students will be able to master tasks that need practical skills, for example like physical education, nursing, labs, music, and art courses [9]. These courses require not only theoretical knowledge but also practical knowledge. In order the master the learning objectives, students may have to practice offline instead of only knowing theoretical studying points. Besides, cooperative skills are vital for students since they need these skills the most when they step into the society and workplace. It is less effective to gain cooperative skills through online studying only, which again shows the importance of face-to-face learning for students.

For higher education students in developing countries, the situation cannot be defined as optimistic. In order fully understand the materials provided by instructors on online classes, students need reliable online learning platforms and internet connection. Unfortunately, students in developing countries have no or little access to online learning opportunities since the existence of bad internet connection, especially in rural areas. For example, nearly 70 percent of Indian students had access to online courses through smartphones, but the platform for online learning cannot be used on smartphones [10]. Mental health is also a part of the problem for students. Poor students with less access to learning resources can feel more depressed compared to students in developed countries. For instance, about 60 percent of nursing students have anxiety problems from the difficulties they faced from online classes [10].
4. Future possible solutions and opportunities for developing countries

There are future possible solutions for developing countries to cope with the coronavirus pandemic. Education systems in developing and low-income countries should design and implement evidence-based actions to boost the recovery of lost parts of education when schools reopen. Because children of illiterate and low-income families can take a large amount of time to regain what they missed due to a lack of support during school closures [9]. Aside from that, teachers in developing countries should be trained with using computers and online platforms. By doing that, more students can get online education since the number of teachers that are capable of online teaching increases. Last but not least, developed countries should give funds to developing and low-income countries to get better access to the internet and education technologies like computers, cameras, and digital books. Despite the difficulties brought by COVID-19, there are also opportunities. Universities and faculty members can cope with the situation in a better way when the next similar pandemic took place with the experience gained from this one. Aside from that, online teaching platforms and technologies have developed and optimized to bring better learning experience for both students and teachers. Also, digital cheating is harder to perform due to the development of online test platforms [10].

5. Conclusion

In conclusion, COVID-19 has affected worldwide education, especially the developing and low-income countries. These countries face different challenges to continue education with the presence of COVID-19. For school and faculty members, providing education online can be challenging while it can hard for students from low-income families to have access to online courses. Though students may show no or mild symptoms from the virus, mental health of students needs more attention to make sure they are in the best state of learning.

Fortunately, there are still possible solutions for these countries to recover their education with the help of the rest of the world and by their own efforts. Economic difficulties can be solved when developed countries provide financial support to developing countries. Developing countries have to learn from their experiences and prepare better for the next similar possible pandemic that might take place in the future.

References
