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## Impact of Covid-19 Pandemic on quality of education

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### Abstract

The Covid-19 pandemic is a huge challenge to education systems. Social distancing to curb the Covid-19 pandemic has caused suspension of classroom teaching in all educational institutions. Government permitted colleges and universities around the world to shut down their campuses indefinitely and move their educational activities onto online platforms. Medical students do not find online classes as effective as the traditional classroom teachings; it could be made more interactive and productive by introducing interactive and brainstorming sessions complementing the conventional face to face education. Owing to financial constraints, students are not able to meet the necessary requirements for effective online learning. The present study aimed to explore the effect of Covid-19 on the quality of education.

**Keywords:** Covid-19; Coronavirus; Pandemic; Quality of Education; financial constraints

### 1. Introduction

According to the World Health Organization (WHO), viral diseases continue to rise, and pose a significant public health problem<sup>[1]</sup>. The clinical continuum of COVID-19 varies from mild illness with non-specific signs and symptoms of acute respiratory disease to extreme respiratory pneumonia and septic shock, and it can transmit from animal to human in the form of touch, through the air, water, utensils, fomite and feco-oral route blood<sup>[2]</sup>. The pathogenesis and clinical characteristics of *Humma-e-Wabai* were described several years ago in the Unani System of Medicine close to the clinical manifestation associated with epidemic or pandemic situations<sup>[3]</sup>. The coronavirus pandemic has impacted medical education, and health care globally<sup>[4]</sup>. The disease can cause life-threatening conditions and it presents challenges for medical education, as instructors must deliver lectures safely, while ensuring the integrity and continuity of the medical education process<sup>[5]</sup>. The lockdown due to COVID-19 had serious implications on mental health, resulting in psychological problems including frustration, stress, depression and quality of education<sup>[6]</sup>. It is therefore important to assess the usability of online learning methods, and to determine their feasibility and adequacy for medical students<sup>[5]</sup>. Radu MC *et al.* (2020)., reported that some negative aspects were reported for Covid-19 impact such as; lack of an adequate infrastructure for some students, less effective teacher-student communication and interaction, impossibility of performing practical applications, lack of socialization, lack of learning motivation, less objective examination (e.g., possibility of cheating), possibility of physical and mental health degradation (e.g., too much time spent in front of screens, installation of a sedentary lifestyle)<sup>[7, 8]</sup>. Consequently, for the new academic year, effective, and efficient measures must be implemented by the management of the university to remove, as much as possible, these negative issues and to improve the performance of online educational process<sup>[7, 9, 10]</sup>. One another reported that It has been shown that medical students and qualified doctors are not adequately confident in their ability to assess and manage skin conditions, and many feel that their undergraduate dermatology teaching was not satisfactory<sup>[11]</sup>.

### 2. Methodology

The impact of Covid-19 on education, and health care has been surveyed Internet sources such as Pubmed, Medline, Scopus, Science Direct, web of science Google Scholar etc.<sup>13,14,15</sup> The keywords used are Covid-19, Pandemic, *Amraz-e-Wabai*, Epidemic, Quality of education, Health Care etc<sup>[1, 3, 16, 17]</sup>.

### 3. Symptoms

The main symptoms of COVID-19 are fever, cough, fatigue, slight dyspnoea, sore throat, headache, conjunctivitis, and gastrointestinal issues [18]. Severe disease and death are more likely to occur in the elderly, and probably in those with pre-existing chronic conditions such as diabetes, malignancies of cardiovascular disease, and hypothyroidism [19, 20, 21].

### 4. Pathogenesis and transmission

Severe acute respiratory syndrome coronavirus (SARS-CoV)-2, a novel coronavirus from the same family as SARS-CoV and Middle East respiratory syndrome coronavirus, has spread worldwide leading the World Health Organization to declare a pandemic [22]. COVID-19 can be divided into three phases based on the cells likely to be infected, corresponding to the different clinical stages of the disease [23, 24, 25]. Higher numbers of leukocytes, irregular breathing results, and high levels of pro-inflammatory cytokines in plasma were reported in patients diagnosed with COVID-19 [26]. The key pathogenesis of COVID-19 infection as a respiratory system that targets the virus was severe pneumonia, coupled with blindness to the ground and acute heart injury [27]. Initially, human-to-human transmission through respiratory droplets or close contacts was suggested as the main routes for pathogen transmission based on the experience gained from the two previous coronavirus epidemics [28, 29, 30].

### 5. Impact of Covid-19 on Education:

The 20th and 21st centuries have witnessed epidemics and pandemics of various infectious agents [31]. The COVID-19 pandemic forced colleges, universities around the world to shut down their campuses indefinitely and move their educational activities onto online platforms. The universities were not prepared for such a transition and their online teaching-learning process evolved gradually [32]. Owing to financial constraints, students are not able to meet the necessary requirements for effective online learning [33]. As with most teaching methods, online learning also has its own set of positives and negatives. Decoding and understanding these positives and negatives will help institutes in creating strategies for more efficient delivery of the lessons, ensuring an uninterrupted learning journey for the students [34]. For many students, one of the biggest challenges of online learning is the struggle with focusing on the screen for long periods of time. With online learning, there is also a greater chance for students to be easily distracted by social media or other sites [35]. Therefore, it is imperative for the teachers to keep their online classes crisp, engaging, and interactive to help students stay focused on the lesson. Another key challenge of online classes is internet connectivity [36]. While internet penetration has grown in leaps and bounds over the past few years, in smaller cities and towns, a consistent connection with decent speed is a problem. Without a consistent internet connection for students or teachers, there can be a lack of continuity in learning for the child [37]. This is detrimental to the education process. Students can learn a lot from being in the company of their peers. However, in an online class, there are minimal physical interactions between students and teachers. This often results in a sense of isolation for the students. In this situation, it is imperative that the school allow for other forms of communication between the students, peers, and teachers [38]. This can include online

messages, emails and video conferencing that will allow for face-to-face interaction and reduce the sense of isolation. Online learning requires teachers to have a basic understanding of using digital forms of learning. However, this is not the case always [39]. Very often, teachers have a very basic understanding of technology. Sometimes, they don't even have the necessary resources and tools to conduct online classes. To combat this, it is important for schools to invest in training teachers with the latest technology updates so that they can conduct their online classes seamlessly. Many parents are concerned about the health hazards of having their children spend so many hours staring at a screen [40]. This increase in screen time is one of the biggest concerns and disadvantages of online learning. Sometimes students also develop bad posture and other physical problems due to staying hunched in front of a screen. A good solution to this would be to give the students plenty of breaks from the screen to refresh their mind and their body [34, 40].

### 6. Conclusion

The effect of COVID-19 on education system has far reaching effects on not only the learning process for the child but it effects the health of students and the adaptive processes are slow causing loss of productive hours for a child. The study emphasizes that policy makers need to keep all these things in consideration while making a shift from classical teaching to the new technology enabled platforms.

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