

# Impacts of COVID-19 Pandemic on Medical Education and Students of Bangladesh

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*Dear Editor,*

The Coronavirus disease 2019 (COVID-19) pandemic is a public health disaster with massive and various social, financial, and health consequences (1), which is transforming the community in countless ways. It has affected lifestyle to economy, playground to pray-yard, primary education to professional education (2). The pandemic has led to unprecedented disruption in well-established, conventional face-to-face medical education and healthcare systems globally. It affects physical, mental, and social well-being of medical students as well as their intellectual skill to learn (3). Besides, high rate of infection and mortality of the physicians in Bangladesh all through the pandemic might be influencing future career plans of young graduates (4). These impacts have drawn limited attention and have been less discussed globally as well as in Bangladesh.

To control the spread of highly contagious COVID-19, governments all over the world have suspended face-to-face teaching in educational institutions (5). It lessens the range of gathering and interactions as well as increases physical distancing among the students, which potentially limits the transmission (6). The government of Bangladesh has closed all institutional activities since March 2020 (4). As COVID-19 affected patients have been increasing in an exponential model, these types of interference were crucial to implement stay home approach at all points. But, at present, educational institutions, general to professional (e.g., Medical, Engineering), are facing numerous challenges due to prolonged closure (2). It causes student absenteeism at lectures due to their lack of interest in monotonous lectures that not have visual

stimulation and provide tiny opportunity for them to involve in discussions (3). COVID-19 has also forced a number of students to resume job to assist their families (1).

Undergraduate medical students, the future of sustainable health systems expressed their worry about sudden changes in curricular delivery, struggling with virtual lectures, loss of peer interaction, applied activities like dead body or model study, laboratory skills, class-basis examinations, professional examinations, ward activities involving direct patient contact, clinical thoughts and experiences sharing, imposed financial burden and changing aspect of future career plan (4, 7). Finally, mandatory one-year clinical internship, which is a vital practice to make a clinically independent and confident graduate physician, was affected due to panic and fears and many interns have left out or not started their internship (2).

COVID-19 pandemic introduces digital home-schooling worldwide by a variety of methods using various online platforms without any uniformity. Consequently, the government of Bangladesh commenced remote learning. Here, most of the students have access to digital devices, but not internet due to plentiful inadequacy. Sometimes distance education becomes a double-edged sword. Some faculty who are unusual with technology encounter difficulties with electronic equipment, and students who lack initiative and time-management abilities, online learning made it complicated to keep up (8). There is a distinguished disparity between medical educations with general education. Here, virtual learning might be helpful for theoretical knowledge but its effectiveness

for preparing future physicians as competent clinicians is still questionable (4).

An online learning setting, comprising both asynchronous (e.g., recorded videos, podcasts) and synchronous (e.g., video conferences, virtual classrooms) distance education, and the introduction of innovative methods of student judgment has developed to face the challenges during and beyond the COVID-19 pandemic (7). During the changeover from traditional classroom teaching to tele-delivery of educational curriculum, medical students of Bangladesh have to overcome numerous social, economic, and cultural barriers (1). Now, the prolonged crisis has imposed serious implications on their lives, including their academic trajectories. This may lessen their potential of conceptual understanding of medicine, analytical skills, and critical thinking, which will decline their self-confidence in clinical practice (7). It is thus crucial to review the usability of online learning approaches and to establish their feasibility and adequacy for medical students (3). The extent and degree of the impact are yet to be established. Hence, facing and tackling the related challenges may be based on the principles of disaster management, including mitigation, preparedness, response, and recovery (9).

Though costs and benefits are inadequately recognized, educational institution closure has an enormous blow on students' learning (5). Subsequent physical distancing measures have resulted in continuous disruption of daily practices of medical students and institutions (7). Innovative transformations are also needed to overcome the impact of COVID-19 pandemic on medical education here in Bangladesh (4). Educational establishment closure is gambling with the potential of thousands of medical students. It will cost a lot to tone down the deficit as postgraduate students will also suffer in a sequel. Alternative revival options should be more realistic and logical to make a complete and safe physician for mankind.

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## References

1. Sharma D, Bhaskar S. Addressing the Covid-19 Burden on Medical Education and Training: The Role of Telemedicine and Tele-Education During and Beyond the Pandemic. *Front Public Health*. 2020; 8: 1-14. doi:10.3389/fpubh.2020.589669. [PMID: 33330333] [PMCID: PMC7728659]
2. Biswas RSR, Uddin MJ. Impact of COVID19 on Medical Education in Bangladesh. *Chattogram Maa-O-Shishu Hospital Medical College Journal*. 2020; 19(2). doi:10.3329/cmshmcj.v19i2.50012
3. Alsoufi A, Alsuyihili A, Msherghi A, Elhadi A, Atiyah H, Ashini A, et al. Impact of the COVID-19 pandemic on medical education: Medical students' knowledge, attitudes, and practices regarding electronic learning. *PLoS One*. 2020; 15(11): e0242905, doi: 10.1371/journal.pone.0242905. [PMID: 33237962] [PMCID: PMC7688124]
4. Johora F, Akter Abbasy A, Tasmin Jeenia F, Chandro Bhowmik M, Moitra P, Ferdoush J. The impact of COVID-19 pandemic on undergraduate medical students of Bangladesh. *Journal of Army Medical College Chattogram*. 2020;3(1):5-9.
5. Engzell P, Frey A, Verhagen M D. Learning loss due to school closures during the COVID-19 pandemic. *Proc Natl Acad Sci U S A*. 2021;118(17):e2022376118; .doi:10.1073/pnas.2022376118 [PMID:33827987] [PMCID:PMC8092566]
6. Head JR, Andrejko KL, Cheng Q, Collender PA, Phillips S, Boser A, et al. School closures reduced social mixing of children during COVID-19 with implications for transmission risk and school reopening policies. *J R Soc Interface*. 2021; 18(177). doi:10.1098/rsif.2020.0970.
7. Papananou M, Routsis E, Tsamakidis K, Fotis L, Marinos G, Lidoriki L, et al. Medical education challenges and innovations during COVID-19 pandemic. *Postgrad Med J*. 2021. doi:10.1136/postgradmedj-2021-140032 [PMID: 33782202]
8. Liu CH, Lin HYH. The impact of COVID-19 on medical education: Experiences from one medical university in Taiwan. *J Formos Med Assoc*. 2021; 120(9): 1782-4. doi:10.1016/j.jfma.2021.02.016. [PMID: 33757674] [PMCID:PMC7938791]
9. Samarac AA. The impact of the COVID-19 pandemic on medical education. *Br J Hosp Med (Lond)*. 2020; 81(7): 1-4. doi:10.12968/hmed.2020.0191. [PMID: 32730144]