

Call for medical students to join the workforce: A potential solution to deal with novel Coronavirus infectious disease 19 pandemic?

On 31st December 2019, a newly discovered virus causing pneumonia-like symptoms was identified as novel Coronavirus, having its origin in Wuhan, a city of China. The director journal of the World health organization (WHO) declared the outbreak of Novel Coronavirus Infectious Disease (NCOVID), as a Public Health Emergency of International Concern (PHEIC) on January 30th, 2020, later recognising it as a pandemic on 11th March 2020. The main mode of transmission is by both air droplets and direct contact, making it a much more transmissible disease.¹ Therefore, individuals who are in close contact with affected NCOVID patients, physicians, medical staff, and medical students who tend to look after infected patients are at increased risk of contracting the virus.

As of the end of April 2020, NCOVID inflicted grievous damage by affecting 3 205 726 human lives worldwide and 15 525 confirmed cases in Pakistan.² Because of an overwhelming number of affected patients in the healthcare facilities, it has been exhausting for the current health care workers. To address this inordinate burden, some developed countries including the United States, Italy, and Ireland have decided to call medical students on the frontline to keep the COVID at bay.³ On April 09, to bolster the workforce team, the Pakistan government also considered young medics to join hands without even accessing their willingness and knowledge against COVID.⁴

During previous pandemics such as influenza, Ebola virus, and now NCOVID, health care providers play a significant role in protecting individuals from illness by providing excellent quality management and treatment. But they are also at greater risk of introducing themselves as additional vectors to spread the disease because of incomplete awareness.⁵ According to recent studies conducted in Pakistan, the undergraduate medical students that are volunteering as frontline had insufficient knowledge regarding the pandemic as compared with the physicians correlating that awareness comes with age and years of clinical experience.^{6,7} The physicians, however, overburdened with the increasing number of cases have neither the time nor the energy to teach. Therefore, the Government of Pakistan before considering young medics to come on the frontline needs to acknowledge their limitations and find ways in which they are best suited to help the community. Legal bodies before issuing an order should survey local students' readiness and willingness whether they are comfortable providing direct patient care or not.⁸

For the sake of medical student's safety, the Association of American Medical College implemented a policy. They recommended that medical students end all patient contacts and suspend their classes/clinical rotations to conserve the Proper Protective Equipment (PPE)-including mask, gloves, and gown.⁹ Pakistan, being a poverty-stricken country with not fully developed health care system, already lacks PPE for its current workforce and ventilators, a key limiting factor utilised in good caring for seriously ill patients with COVID. This has led to a surge of healthcare workers contracting the infection, out of which eight have already been reported dead.¹⁰ In health care setups of Pakistan, the estimated number of ventilators currently is around 2200 and to prepare for emergencies there is a dire need of purchasing more ventilators. The crisis will greatly increase poverty hence the government of Pakistan has already requested emergency funding to face the looming crisis of pandemic.¹¹ Despite knowing the poor economic state of affairs and scarcity of major virus-fighting equipment, how can legal authorities even consider medical students, who have little knowledge to operate complex machines such as ventilators, to come on the frontline?

In Pakistan, a medical student's day on average is mostly consumed by a lecture and a few hours of ward consisting of bedside classes, basic history, and examination, shadowing a consultant during rounds, and the outpatient clinics. They do not go beyond the stage of observing, analysing, and advising. The anxiety of excelling in the bare minimum, having their basic concepts cleared, struggling to make a connection of their 2 years of theoretical knowledge into practical, and learning the practical ways that is, let us admit it, sometimes different from the books, is already very overwhelming. Now if given to fight a lethal contagion as their first task in the work field, imagine the spike their psychological health curve would take. It is no hidden fact that pandemic outbreaks take a toll on the mental health of the force in action by having to operate with limited resources, dealing with emergency decision making and failing to save lives. Similarly, this specific pandemic has proven to be no picnic to the stress of already equipped with experienced nurses and physicians, who are still trying to figure out how best to stop the upheaval.¹² Multiple studies have shown how various factors such as depersonalisation and a reduced sense of accomplishment have played a role in increasing cognitive stress, emotional exhaustion, and burnout of health care workers and how the hospitals are taking measures to combat that whilst fighting the pandemic alongside.¹³

With staggered confidence comes moral injury in medical students. The term Moral Injury is defined as adverse psychological impacts of delivering emergency and prehospital management with limited resources and constraints that are beyond the control of health care workers.¹⁴ The medical school holds a major responsibility to ensure that their future doctors are sufficiently upskilled and confident enough to provide indispensable patient care, even in a crisis. Hence, medical schools should prevent the incident of possible moral injury that might occur as a consequence of COVID-19 dispensary to young minds. Instead, they should utilise this crucial time by arranging formal training, motivational seminars, and informational panels to combat the virus.⁷ The world is going to need them and their emergency readiness more than ever in the future for its aftershock. They need to be mentally primed and well equipped with the knowledge to confront anything that comes in their direction.

The ethical dilemma associated with this predicament cannot be ignored. The benefit to the loss ratio for students would be far from equal. With working comes certain legal obligations of employers towards the employees and medical students will not be a hired help. Studies have shown that COVID-19 has disrupted the global economy, and the poor countries are facing the greatest shocks^{11,15} so with the government already encountering a major financial strain, they simply will not be paying them. Thus, not only would they be taking advantage of free labour but they also will have no contractual responsibility towards the students' health issues if faced with any, such as contracting COVID-19. The government would have to consider reimbursing their assistance by either providing tuition or loan forgiveness. Not just that, the majority of the students belonging to a middle-class background do not earn or can afford a car of their own therefore use public/ paid private transport for conveyance to university and hospital. With transportations shut down, how exactly do they expect them to reach the workplace unless the government is willing to provide ease with adequate transportation?

Worldwide, since schools and universities have shut down, the academic loss is being compensated with the help of online classes. With hour-long classes along with self-studies of an average 4 hours, all while preparing for major licensing examinations they will have to sit in later this year, the final years are fully occupied. We have already talked about how the world is going to need good doctors post-calamity such as this one, hence any extra responsibility would be a compromise on their education and their future.

The ultimate solution to end the corona pandemic is a vaccine and the race is on to find and produce a vaccine in the world. Because of recent advancements in the extraction of immunoglobulin from the plasma of recovered patients, the path towards vaccine is becoming fast-tracked.¹⁶ We are hopeful that the treatment will be out soon enough so the need for our youngsters to risk their lives would be minimised. Young medics will be more helpful in the field after treatment invention instead of now when uncertainty about virus symptom control prevails. Ignoring post-crisis circumstances, the state will eventually lose a huge bulk of future physicians if accurate decisions are not taken immediately.

In lieu of this issue, alternative measures must be implemented. The first and foremost act students can do is follow WHO's guidelines for infection control measures. Practice handwashing, sanitisation, and social distancing themselves as well as preach those to their relatives and neighbours. Enhance their knowledge about the signs, symptoms, and supportive measures to be undertaken in case of a suspected illness so their close ones can approach them for minor information instead of unnecessarily overcrowding the hospitals. The population most vulnerable to contract the disease such as elderly, immunocompromised can be helped with tasks outside homes such as medicines and groceries.

The unsupervised spread of fake myths is the leading aetiology of panic. The influx of misinformation has been creating paranoia, fear, and loss of hope. Students can calm the storm by circulating authentic community awareness online and offline. Along with that, demote the denunciation of health care workers by ill-informed members of the public and promote emotional backing, praise, and gratefulness which would not only boost their morale but also encourage people to hold them with utmost dignity and respect.

The number of cases in China was reported to decrease by 60% after the implementation of social distancing, quarantine, and isolation.¹⁷ Doctors in Pakistan have also expressed their concern regarding the aftermaths of softening the lockdown, saying losing doctors amid these crises is what we should fear.¹⁰ The importance of isolation units during a pandemic was already highlighted by New York Governor Andrew Cuomo when he called on army corps engineers to help build temporary facilities.⁸ Pakistan with a population of more than 200 million currently has 215 hospitals providing isolation medical facilities with a total of 2942 beds only.¹⁸ Considering this situation, the legal bodies should build enough isolation units before catering to the additional workforce on the field.

Another possible solution is that the government, instead of looking for inexperienced individuals must call back all the graduates who have left their practice for various reasons, utilising the money and time spent on their degrees because every doctor is an asset. If not the work field, doctors can start online/ teleclinic to aid as general physicians and primary caretakers to reduce the burden on the physicians out there battling the cause. This is war. We must act smart rather than emotionally. Only then will we be able to bear fruits and come out resilient.

DISCLOSURES

The authors declare that there is no conflict of interest.

DATA AVAILABILITY STATEMENT

Data sharing not applicable to this article as no datasets were generated or analysed during the current study.

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