A Call for Action—Empowering Medical Students to Facilitate Change

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The only constant in our lives is change. However, daring to make a change is another matter. There is a degree of apprehension regarding inconstancy in our general population and even more so in the medical community. The International Journal of Medical Students (*IJMS*) calls for overcoming this inertia and is leading the way for improved global healthcare.¹⁻⁷

This issue brings to light how, across the world, we are seeing examples of change and how this is improving our understanding of the human body and the world. We explore first-hand experiences of mitigating COVID-19 while also keeping in touch with other areas of clinical medicine and scientific research. We also take a look at concerns surrounding environmental healthcare and simultaneously, urge all readers to engage in the cause with us. Core to the IJMS in leading as a changemaker is through initiating empowerment, building a strategy, and utilizing our resources and the skills of all medical students across the globe to facilitate change into a reality.

The IJMS is honored to host a platform for medical students to contribute towards the growing medical literature. We would also like to express our appreciation to the flourishing community of medical student researchers for their motivation to offer meaningful and impactful pieces of literature to the field of medicine during these challenging times.

The COVID-19 pandemic has revolutionized the world, forcing a change in all the aspects of our lives. Of note, as a society we have adapted ourselves to wearing a face mask, hand hygiene practices and lockdowns. Social distancing measures have been implemented, despite its incompatibility with our instinctive nature as humans to feel connected and socialize. In this issue, we are exposed to student perceptions from the United States on social distancing practices,8 and Nigeria on their online medical education.9 From a more personal level, $\ensuremath{\mathsf{COVID}\text{-}19}$ has also challenged our value systems and priorities. Through an experience report, we are introduced to brave medical students who describe their voluntary participation on the front-line during a deadly wave of the virus in Vietnam.¹⁰ All of the adjustments we have made to the current COVID-19 pandemic are based on our continual developing understanding of the SARS-CoV-2 virus. As healthcare workers and researchers we are learning about the virus's pathophysiology, clinical manifestations, treatment options and complications. Here we are introduced to two new case reports related to life-threatening COVID-19 complications including a non-traumatic splenic rupture, $^{\scriptscriptstyle 11}$ and a late onset spontaneous pneumothorax. $^{\scriptscriptstyle 12}$

Sustainability in modern medicine is ensured through continuous evolution in all of its domains ranging from the eleven organ systems in humans to soft skills needed for improving doctor-patient relationships. Advancements and sizeable changes in medicine are

difficult to achieve due to the broad scope of the field. The IJMS strives to achieve this through observation and analysis of research in its various domains.

In this issue we are reminded that aggressive and atypical presentations of classical diseases should prompt a search for underlying immunosuppression. This is highlighted in a case report of a 42-year-old man with acute myelitis and meningitis secondary to varicella zoster reactivation who was found to have acquired immunodeficiency syndrome.¹³ Additionally, a case of accidental ingestion of dilute benzalkonium chloride with severe upper gastrointestinal injury and chemical pneumonitis highlights caution and the need for specialist intervention in all cases of poisoning irrespective of the toxin.¹⁴ Furthermore, an original article by Garcia-Espinosa et al. shows that diabetes mellitus, hypertension and a prior intracranial hemorrhage, can assist in the clinical suspicion and prognosis for an arteriovenous malformation.¹⁵ Another such article delves into how racial and insurance-based health disparities influence length of stay and total cost of a cholecystectomy.¹⁶ Additionally, we are also reminded of the importance of clinical rotations during medical school to engage students in real-life patient care situations. Be it in cardiology where the students' preference has reduced to a mere 17% according to a Canadian survey,17 or a rotation in Pediatrics during which the author developed an awareness for physician interference and the honest doctor-patient communication.18

Similarly, it is expected that in the world of scientific medical research we find a pattern of constant change, as it fosters an environment of learning, discovery and growth for the development of the medical field. Raj et al. discusses the unique skill set medical students offer in large studies due to their open-minded, refreshing and innovative approach to challenges.¹⁹ Additionally, we are called to consider a collaborative solution to global healthcare inequality through student exchange research programs aimed at training a new generation of healthcare professionals from low-income nations.²⁰

Finally, and most importantly, as a healthcare journal we call for immediate actionable change on the greatest threat to global public health – environmental destruction. We report on how rising temperatures and the elimination of the natural world will see ubiquitous devastating effects, primarily worsening rates of morbidity and mortality. It is our responsibility to appreciably contribute individual and collective actions. As a journal we aim to advocate for environmental sustainability through our attendance at multiple United Nation facilitated conferences.²¹ Advances in medicine must be simultaneously substantial yet sustainable for the environment and for the betterment of the entire human race. Only through policy changes and rigorous ground level work, can we hope to reverse the

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deteriorating climatic conditions. Our health is closely intertwined with the planet's health; if one of these collapses, so will the other.

In this issue, you will catch a glimpse of the ongoing transformation in various fields of medicine, some of which resulted because of the

COVID-19 pandemic, while others emerged in spite of it. Medicine is changing like never before, and it is our responsibility and duty as healthcare professionals from all around the world to support that change.

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