

Hurricane Kids: Impact of Socioeconomic, Public Health, Medical Education, and Natural Disasters on a Doctor in Training

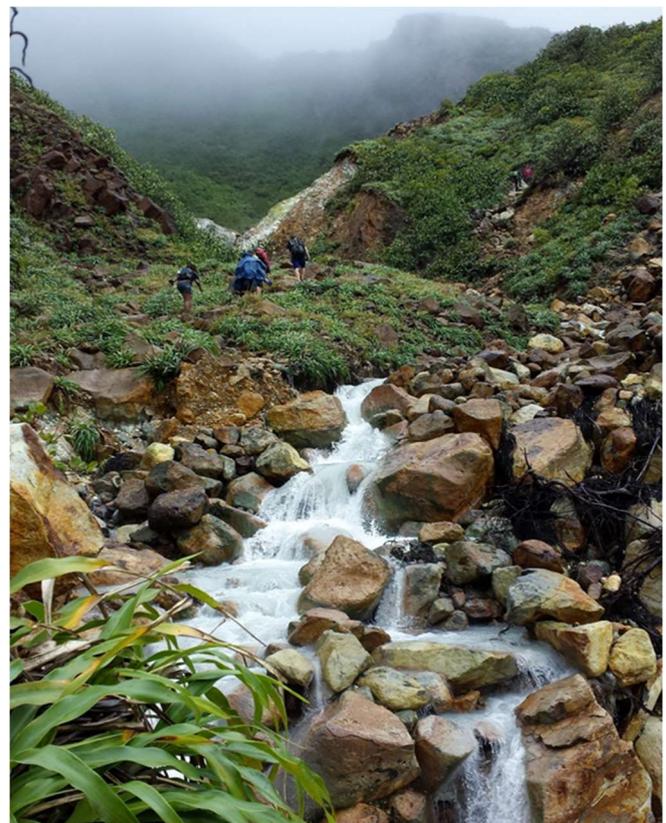
Kate Young.¹

The Experience

My first year of residency would have been complete by July 2021 if the COVID-19 pandemic did not cause shutdowns of hospital clerkships, United States Medical Licensing Exam (USMLE) centers, and subsequent major revision of national licensing mandates. If I could measure impact of adverse life events by Saffir-Simpson hurricane scale¹, I would grade this setback at the end of my medical school journey as the lowest (Category 1) and the one at the beginning as the highest (Category 5). Having your plans derailed by circumstances outside of your control feels different when you are fighting your battles alone or when the harm is not done by someone you trusted unconditionally. The excitement of medical school acceptance news faded the day my child and I found ourselves in a state of emergency. Everything we had was gone in an instant without a warning; everything had to be rebuilt from ground zero going forward. A family member seized our savings and belongings, cancelled credit cards, and locked us out of the home we owned. An investigation was started, but as a sole immigrant with my support network left behind in my home country, I had no one to turn to for help.² Nonetheless, I was determined not to let another person's duplicity obliterate my dream of becoming a doctor and asked the Dean for deferment. I cut my premed classes short, secured a job, hired an attorney to file for divorce and to recover stolen assets, moved into a new house, and applied for a student loan. A year later I was in Dominica for my white coat ceremony. A doctor once told me that they call us Caribbean medical school graduates 'hurricane kids' and I recall wondering what he meant by that.

Dominica is an island in the Lesser Antilles known for its pristine landscapes (See **Figure 1**), hurricane history, and high per capita incidence of centenarians.³ It has claimed the world's oldest citizen,⁴ Ma Pampo Israel, who passed at the age of 128. While Dominicans thrive in their surroundings,⁵ I was substantially impacted by their microworld of multidrug-resistant *Pseudomonas aeruginosa*, *Helicobacter pylori*, and mosquito-borne viruses.⁶ I grew up in Russia and made it through the era of rationed food, held-back wages by corrupt politicians, and frequent power and water outages. However, the public health policy was robust and proper healthcare was accessible to all. I learnt to function in an under-resourced environment, but although I like to think I have a strong immune system considering my extensive worldwide travels, I still succumbed to tropical heat and poor sanitation.^{7,8} Dengue fever confined me to bed for 2 weeks in the first semester of my academic year. My first ear infection assumed a chronic state and progressed to malignant mastoiditis in the third semester. Bouts of gastroenteritis and dysentery led to hypovolemic shock and hospitalization in the fourth semester, and the ensuing peptic ulcer required 4 trials of triple antibiotic

Figure 1. Dominica, the Nature Island. Hurricane kids on treacherous expedition to the Boiling Lake. Like my medical school journey, the view from the top of the dormant volcano was worth the climb.



therapy. The second-year of learning was further enhanced by the hurricanes. I lived through the aftermath of the tropical storm "Erika" which has left 30 people dead, and the rest of 17,000 without electrical power and drinking water for months.⁹ We were evacuated to a nearby island and then returned to Dominica to partake in the international aid efforts treating traumatic injuries and opportunistic infections. Two years later, Hurricane "Maria" caused the deaths of 3,000 Puerto Rican and 65 Dominican individuals and rendered 85% of Dominican population homeless.¹⁰ At this timepoint, the administration quit restoration efforts and relocated the campus.

¹ MD, Ross University School of Medicine, Barbados, West Indies.

About the Author: Kate Young graduated from Ross University School of Medicine (RUSM) in November 2020. She is a recipient of the American College of Physicians' Young Achiever award and several RUSM research scholarships. She will begin her residency training at the Medical College of Georgia - Augusta University in the United States in July 2021.

Correspondence:

Kate Young

Address: Two Mile Hill St. Michael, BB11093, Barbados

Email: kateyoung@mail.rossmed.edu

Editor: Francisco J. Bonilla-Escobar
Student Editors: Nicole Katherine Connors
 Andrew Thomas
Copyeditor: Adam Urback
Proofreader: Adnan Mujanovic
Layout Editor: Sajjad Ali

Submission: Feb 3, 2021
Revisions required: Mar 3, 2021
Received in revised form: Mar 9, 2021
Acceptance: Mar 12, 2021
Publication: Apr 12, 2021
Process: Peer-reviewed

I was looking forward to the peace and comfort of familiar surroundings as the next two and a half years of school were scheduled to take place in Florida, USA. Unfortunately, my return home was not as peaceful as I had hoped. I was pulled into a child custody litigation and had to defer my clinical rotations. We subsisted on student loans and could not afford an attorney, so fighting for my son's well-being 'pro se' turned into a full-time job. In the end, even the petition to relocate with a minor was denied. With nothing more to lose, I moved across the state to resume school and then drove 10 hours every other weekend to take care of my son. I was chronically exhausted and sleep-deprived¹¹ but I focused on my dream and made time to engage in research and present my findings at medical conferences. I received honors in my core clerkships, published my research, and passed the board exams. When the Florida governor issued a state of emergency in the face of approaching tropical storm "Irma", I calmly evacuated to Georgia. I stopped wondering about the meaning of 'hurricane kids' a long time ago; it is an epithet describing young adults whose resilience and compassion had been elicited and magnified by surviving disasters. I spent countless hours in classrooms, libraries, labs, and hospitals working hard to become what my Dean's Letter qualifies as 'an excellent physician', yet I do not owe my quality as a doctor to textbooks and question banks; I owe it to taking chances and learning from my experiences.

A year into the pandemic, travel and social gatherings are still forbidden, the death toll continues to rise, and politicians on television explain away the pervasive chaos with mantra of "unprecedented times".¹² People ask me 'When is this going to end? They say to me "You are the doctor, you should know". What I do know is that 'social distancing' is not nearly as hard as 'social isolation' and that there is abundance of destitution in the world. I know the rigor of the medical school curriculum is real, and the demand for grit does not end after a trauma surgery rotation, USMLE exams, or a viral pandemic. None of it gets better with time; we-human beings-get better at facing challenges. Resilience and compassion are best forged in the heat of the real world. For a word of comfort to sound genuine, for a treatment plan to be reasonable, for a patient to believe in it and remain compliant with it. It is incumbent on us as physicians to cultivate these qualities early in our careers in order to help other people trapped in an ailing body, or a bad socioeconomic situation.

These are 'unprecedented times' for the medical education as well.¹³⁻¹⁴ As the USMLE Step 1 was demoted to pass/fail and Step 2 CS was annulled altogether, medical students were freed from subjecting their lives to chasing an anonymous score at the expense of mastering a very multifaceted field of medicine and serving the community. Explore, lead, advocate, turn negatives into a positive, and you will learn to truly heal others.

References

1. Federal Emergency Management Agency. SLG 101: Guide for All-Hazard Emergency Operations Planning: Hurricane, p.6-D-1. Available from: <https://www.fema.gov/pdf/plan/6-ch-d.pdf>; cited 2021 Mar 08.
2. McLeod JD, Kessler RC. Socioeconomic status differences in vulnerability to undesirable life events. *J Health Soc Behav.* 1990 Jun;31(2):162-72.
3. US Department of State. Dominica. Available from: <https://2009-2017.state.gov/outofdate/bgn/dominica/121269.htm>; updated 2015 Nov 10; cited 2021 Mar 22.
4. Fineman M. An island discovers a treasure. *Los Angeles Times.* 2000 Mar 07; archived ed. Available from <https://www.latimes.com/archives/la-xpm-2000-mar-07-mn-6245-story.html>
5. Schnitter R, Verret M, Berry P, et al. An Assessment of Climate Change and Health Vulnerability and Adaptation in Dominica. *Int J Environ Res Public Health.* 2018 Dec 28;16(1):70.
6. World Health Organization. Worldwide country situation analysis: response to antimicrobial resistance, 2015. Available from: <https://www.paho.org/en/node/63913>; updated 2015 Apr 15; cited 2021 Feb 3.
7. Levy SB, Marshall B. Antibacterial resistance worldwide: causes, challenges, and responses. *Nat Med.* 2004 Dec;10(12 Suppl):S122-9.
8. Angelo KM, Haulman NJ, Terry AC, et al. Illness among US resident student travellers after return to the USA: a GeoSentinel analysis, 2007-17. *J Travel Med.* 2018 Jan 1;25(1):10.
9. Dominica: Tropical Storm Erika - Emergency appeal operations update no. 2 (MDRDM002). International Federation of Red Cross And Red Crescent Societies (Report). ReliefWeb. 2016 Jan 21. Available from: <https://reliefweb.int/sites/reliefweb.int/files/resources/MDRDM002eu2.pdf>; cited 2021 Mar 09.
10. Hurricane Maria. Wikipedia. Available from: https://en.wikipedia.org/wiki/Hurricane_Maria#cite_ref-1834_Dominica_hurricane_4-0; cited 2021 Mar 09.
11. Popay J. Being a woman is hard work: the policy implications of poor health among lone mothers. *J Epidemiol Community Health.* 1999;53(12):749.
12. Major C. Unprecedented Times and Innovation. *Innov High Educ.* 2020 Oct 23:1-2.
13. Boulet JR, Pinsky WW. Reporting a Pass/Fail Outcome for USMLE Step 1: Consequences and Challenges for International Medical Graduates. *Acad Med.* 2020 Sep;95(9):1322-1324.
14. Murphy B. USMLE Step 2 CS canceled: What it means for medical students. *American Medical Association.* 2021 Feb 04. Available from: <https://www.ama-assn.org/residents-students/usmle/usmle-step-2-cs-canceled-what-it-means-medical-students>

Acknowledgments

None.

Conflict of Interest Statement & Funding

The Authors have no funding, financial relationships or conflicts of interest to disclose.

Author Contributions

None.

Cite as

Young K. Hurricane Kids: Impact of Socioeconomic, Public Health, Medical Education, and Natural Disasters on a Doctor in Training. *Int J Med Students.* 2021 Jan-Apr;9(1):84-5.

This work is licensed under a [Creative Commons Attribution 4.0 International License](https://creativecommons.org/licenses/by/4.0/)

ISSN 2076-6327

This journal is published by the [University Library System, University of Pittsburgh](https://www.library.pitt.edu/) as part of the [Digital Publishing Program](https://www.library.pitt.edu/digital-publishing-program/) and is co-sponsored by the [University of Pittsburgh Press](https://www.library.pitt.edu/).

