

Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

Elsevier hereby grants permission to make all its COVID-19-related research that is available on the COVID-19 resource centre - including this research content - immediately available in PubMed Central and other publicly funded repositories, such as the WHO COVID database with rights for unrestricted research re-use and analyses in any form or by any means with acknowledgement of the original source. These permissions are granted for free by Elsevier for as long as the COVID-19 resource centre remains active. central role in the severity of COVID-19 in marginalised communities.<sup>2</sup>

While the obesity epidemic in the USA has continued an upward trend over the last few decades, the number of Black women with obesity also continues to rise and is approximately 40% higher than the number of white women with obesity, and 25% higher than the number of Hispanic women with obesity.3 Surprisingly, only 1% of patients eligible for bariatric surgery (ie, those with a BMI of  $\geq$  35 kg/m<sup>2</sup> with obesity-related comorbid conditions, or those with a BMI of >40 kg/m<sup>2</sup>) actually receive surgical management for obesity.4 Racial or ethnic factors, socioeconomic factors, referral bias, and insurance barriers have been well established as contributing factors to inequity in access to this life-saving treatment for obesity.5

As bariatric surgeons, our patients seek us out, reporting their weariness in struggling with obesity and its associated diseases, decreased quality of life, weight stigma, discrimination, and shortened life expectancy. As physicians, we took an oath to prevent harm to patients entrusted to our care, yet we have witnessed the inequity of the American health-care system first hand, in which equal access to care is not ubiquitous among all communities, races, and ethnicities. Finally, as Black women, we know all too well that our community is one in which these disparities in access to care are widespread or the quality of care received might be substandard (or both).

Therefore, our oath remains yet unfulfilled. One pandemic has unearthed a second; one of inequity in health care that continues to have a devastating impact on the Black community. With equitable access to health care and by adequately treating the disease of obesity, we can improve the health, and consequently reduce the severity of COVID-19, in these individuals. We are duly bound as a community to address these health disparities immediately, and to eliminate bias as a barrier to care. After all, these are the very inequities about which Dr King warned. Our bariatric patients need us, and the Black community needs us. We cannot continue to deny these individuals access to a proven procedure that we know can reduce the prevalence of obesity, improve health, and, most importantly, save lives. We must stand in the face of injustice, and work towards equitable health care for all.

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- 1 Centers for Disease Control and Prevention. Weekly updates by select demographic and geographic characteristics. 2020. https://www.cdc.gov/nchs/nvss/vsrr/covid\_ weekly/index.htm (accessed May 30, 2020).
- 2 Garg S, Kim L, Whitaker M, et al. Hospitalization rates and characteristics of patients hospitalized with laboratoryconfirmed coronavirus disease 2019—COVID-NET, 14 States, March 1–30, 2020. MMWR Morb Mortal Wkly Rep 2020; 69: 458–64.
- 3 Hales CM, Carroll MD, Fryar CD, Ogden CL. Prevalence of obesity and severe obesity among adults: United States, 2017–2018. NCHS Data Brief 2020; 1–8.
- NHLBI Obesity Education Initiative Expert Panel on the Identification, Evaluation, and Treatment of Obesity in Adults (US). Clinical guidelines on the identification, evaluation, and treatment of overweight and obesity in adults. 1998. https://www.ncbi.nlm.nih.gov/ books/NBK2003/ (accessed May 9, 2020).
  Johnson-Mann C, Martin AN, Williams MD,
  - Johnson-Mann C, Martin AN, Williams MD, Hallowell PT, Schirmer B. Investigating racial disparities in bariatric surgery referrals. Surg Obes Relat Dis 2019; **15:** 615–20.

## Back to normal? Building community resilience after COVID-19

Although the COVID-19 pandemic is far from over, many countries are resuming economic and social activities, with the aim of returning to some semblance of normality. But what should the new normal be? The pandemic has exposed how the status quo produced uneven vulnerability to COVID-19, with the most disadvantaged groups bearing the greatest health, social, and economic burden. Globally, population groups with higher prevalence of noncommunicable diseases (NCDs), such as type 2 diabetes or hypertension, have had higher hospitalisation and death rates.<sup>1</sup>These pre-existing conditions are often framed as the result of individual lifestyle choices. However, viewing variation in risk at an individual level diverts attention from the deeper causes of susceptibility, particularly how socioeconomic inequalities shape health risks. In the USA, for example, rates of diabetes are highest among Indigenous, Latino, and Black people who are subject to economic and social discrimination.<sup>2</sup>

Research in the fields of developmental origins of health and disease and environmental epigenetics has revealed how adverse social and material conditions during early life increase later risk of NCDs.<sup>3</sup> This association accords with insights from the social sciences showing how social structures like racism or socioeconomic deprivation become embodied, shaping health throughout the life course and across generations.<sup>4</sup> Therefore, social justice is fundamental to promoting health in society-greater resilience to health emergencies requires systemic rather than individual change.

The post-pandemic recovery phase offers opportunities for devising social and public health policies that channel resources to marginalised communities and support community resilience. The Hawaii State Commission on the Status of Women,<sup>5</sup> for example, has proposed a post-pandemic recovery plan that advocates adopting universal basic income and single-payer health care, improving maternal and neonatal health care, addressing gender-based violence, and supporting Native, Black, and immigrant women. The Commission argues: "Rather than rush to rebuild the status quo of inequality, we should encourage a deep structural transition to an economy that better values the work we know is essential to sustaining us. We should also address the crises in health care, social, ecological, and economic policies laid bare by the epidemic."

Drawing on literature regarding the developmental origins of health and disease, we argue that recovery plans should also pay attention to groups who are not showing high COVID-19 morbidity and mortality rates now, but whose experiences and exposures substantially affect community health in the long term, especially mothers and children. Disinvesting in maternal and child health during the period of economic recession following the pandemic will sow the seeds of later health inequality and NCD risk, which will undermine community resilience to future health emergencies.

Although the rallying cry that "we're all in this together" might encourage members of society to help reduce the spread of the virus, it also hides the fact that some groups are affected much more than others. We argue for community-led and state-supported initiatives for building resilience that focus on the most vulnerable among us, and allow individuals, families, and communities to support each other in times of crisis and beyond. Any ethical new normal must encompass substantial systemic change that focuses on social, reproductive, and health justice and redefines the socioeconomic conditions we consider acceptable.

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- Fang L, Karakiulakis G, Roth M. Are patients with hypertension and diabetes mellitus at increased risk for COVID-19 infection? Lancet Respir Med 2020; 8: e21.
- 2 Spanakis EK, Golden SH. Race/ethnic difference in diabetes and diabetic complications. Curr Diab Rep 2013; 13: 814–23.
- 3 Penkler M, Hanson M, Biesma R, Müller R. DOHaD in science and society: emergent opportunities and novel responsibilities. J Dev Orig Health Dis 2019; 10: 268–73.
- Krieger N. Embodiment: a conceptual glossary for epidemiology. *J Epidemiol Community Health* 2005; **59:** 350–55.
  Hawai'i State Commission on the Status of
  - Hawai'i State Commission on the Status of Women. Building bridges, not walking on backs: a feminist economic recovery plan for COVID-19. April 14, 2020. https:// humanservices.hawaii.gov/wp-content/ uploads/2020/04/4.13.20-Final-Cover-D2-Feminist-Economic-Recovery-D1.pdf (accessed June 16, 2020).

## Metabolic health and COVID-19: a call for greater medical nutrition education

In a recent Editorial,<sup>1</sup> The Lancet Diabetes & Endocrinology highlighted the burden of underlying metabolic diseases in the ongoing global health crisis of COVID-19. When facing a life-threatening condition such as COVID-19, it is important that patients have the strength and reserve to recover from the acute phase of illness while also being prepared for the likely burdensome rehabilitation phase they will face later on. In both these phases, nutrition is of paramount importance.

The Editorial notes the relationship between obesity and hospitalisation risk with COVID-19 while reporting on conditions such as diabetes, hypertension, and cardiovascular disease. All of these conditions have

strong links to both dietary patterns and lifestyle behaviours. Likewise, although lesser noted, underweight individuals are also at risk of being immunocompromised and therefore have an increased susceptibility to infections.<sup>2</sup> It is thought that there will be a multi-stage impact of COVID-19 where we would need to look at the role of nutrition in acute treatment, in recovery, and in prevention of chronic conditions that increase susceptibility to infection. Medical professionals must also consider the influence of nutrition on mental health. However, doctors and medical students are illequipped to assist patients in making informed nutritional decisions.

A recent publication<sup>3</sup> highlights the pressing need for greater education on nutrition within medical curricula. It describes how more than 95% of medical students and doctors believe that doctors play a vital role in nutritional care, yet more than 70% reported that they received less than 2 h nutrition training while at medical school. The study found that lack of knowledge was the main barrier to advising patients on nutrition. Bearing in mind the paramount importance of nutrition, this is simply unacceptable.

Barriers to increased medical nutrition education include alreadyfull teaching schedules and limited student engagement, with only 68% of students believing that there is a need for increased nutrition education within their curriculum.<sup>3</sup> In the context of COVID-19, the importance of nutrition has only increased—we must overcome the barriers to greater medical nutrition education to improve the metabolic health of citizens.

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