

Attaining Health Equity in New Zealand and the World

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Every person should have the opportunity to attain one's full health potential and no one should be disadvantaged from achieving this potential because of social position or other socially determined circumstances. However, significant healthcare disparities linked with race/ethnicity, sex, age, and economic status, exist in many countries. Systemic racism, also known as institutional racism, is increasingly being recognized as a major public health challenge, and is at the basis of racial and ethnic disparities.¹ This issue has been scrutinized by numerous studies with the goal of inducing adequate change to ensure health equity and equality among all races and ethnicities.^{2,3}

In *The Lancet Regional Health – Western Pacific*, Thompson and colleagues described racial disparities in stroke care and outcomes in a nationwide observational study in New Zealand.⁴ To begin with, this study showed that the majority of stroke interventions, especially acute reperfusion and revascularization therapies, were similar between different ethnic groups in New Zealand. This reflects the efficacious acute and post-acute stroke care, as well as the public stroke awareness FAST (Face, Arm, Speech, Time) campaigns in New Zealand. Importantly, it indicates that equal access of stroke care is achievable. In contrast, studies from several other countries have shown that minorities were less likely to receive intravenous thrombolysis or endovascular thrombectomy compared with major ethnic groups.^{1,2,5} A recent study about the differences in US hospitals in providing carotid revascularization therapy showed that hospitals serving minority populations were less likely to offer carotid revascularization in patients where carotid disease was the stroke culprit, compared with majority-serving hospitals.⁶ The controversial results of studies from different countries heighten the different weight each of them confers to

acute stroke care in majority and minority populations and should elicit curiosity about why it is so efficient in some countries and not so much in others.

Thompson and colleagues did find that Non-Europeans have poorer access to a few other key measures including acute-stroke unit and anticoagulant and they are less likely to achieve favorable outcomes. This study also found that cultural support services for minority ethnic groups were inconsistently implemented, and among those offered, accessed only by a minority of patients⁴. Similarly, in the United States, minorities were found less likely to receive anticoagulant for atrial fibrillation, and when treated, the quality of anticoagulant use was lower in black and Hispanic individuals.⁷ Stroke care disparities are at least partially explained by disparities in stroke awareness and education among minority races and ethnicities.³ Culturally targeted programs should be developed, with a focus on culturally compatible stroke education for patients in the healthcare system as well as the integration of non-medical resources such as spiritual and community services.⁸

In summary, while health inequities are by no means recent or limited to one country, it is hoped that increased interest and awareness about them will translate into a better understanding of their origins and will help with their resolution. Racial and ethnic, as well as gender, geographic, socioeconomic, and global health inequities have been one of the greatest challenges for mankind. Despite the immense progress in lowering the global burden of stroke, it remains the second leading cause of death globally. The Health Equity and Actionable Disparities in Stroke: Understanding and Problem Solving (HEADS-UP) forum, an annual multidisciplinary symposium, with the aim of bridging major inequities in stroke, is a perfect example of continuous collaborative efforts to benefit the vulnerable and underserved populations.⁹

Declaration of interests

The authors report no conflicts of interests.

Author contributions

Sidonie E. Ibrikji wrote the original draft of the manuscript.

Shumei Man was responsible for the conceptualization, review, and revision/edit of the manuscript.

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References

- 1 Levine DA, Duncan PW, Nguyen-Huynh MN, Ogedegbe OG. Interventions targeting racial/ethnic disparities in stroke prevention and treatment. *Stroke*. 2020;3425–3432. Published online.
- 2 Schwamm LH, Reeves MJ, Pan W, et al. Race/Ethnicity, quality of care, and outcomes in ischemic stroke. *Circulation*. 2010;121(13):1492–1501.
- 3 Boehme AK, Siegler JE, Mullen MT, et al. Racial and Gender Differences in Stroke Severity, Outcomes and Treatment in Patients with Acute Ischemic Stroke. *J Stroke Cerebrovasc Dis*. 2014;23(4):e255.
- 4 Thompson SG, Thompson S, Barber PA, et al. The impact of ethnicity on stroke care access and patient outcomes: a New Zealand nationwide observational study. *The Lancet Regional Health – Western Pacific*. 2022. <https://doi.org/10.1016/j.lanwpc.2021.100358>.
- 5 Rinaldo L, Rabinstein AA, Cloft H, Knudsen JM, Castilla LR, Brinjikji W. Racial and Ethnic Disparities in the Utilization of Thrombectomy for Acute Stroke: Analysis of Data from 2016 to 2018. *Stroke*. 2019;50(9):2428–2432.
- 6 Faigle R, Cooper LA, Gottesman RF. Lower carotid revascularization rates after stroke in racial/ethnic minority-serving US hospitals. *Neurology*. 2019;92(23):e2653–e2660.
- 7 Essien UR, Holmes DN, Jackson LR, et al. Association of Race/Ethnicity With Oral Anticoagulant Use in Patients With Atrial Fibrillation: Findings From the Outcomes Registry for Better Informed Treatment of Atrial Fibrillation II. *JAMA Cardiol*. 2018;3(12):1174–1182.
- 8 Skolarus LE, Sharrief A, Gardener H, Jenkins C, Boden-Albala B. Considerations in Addressing Social Determinants of Health to Reduce Racial/Ethnic Disparities in Stroke Outcomes in the United States. *Stroke*. 2020;51(11):3433–3439.
- 9 Ovbiagele B. HEADS-UP: Understanding and Problem-Solving: Seeking Hands-Down Solutions to Major Inequities in Stroke. *Stroke*. 2020;3375–3381. Published online.