## Challenges in achieving racial and ethnic health equity in type 2 diabetes: access to newer medications

Milan K. Piya<sup>a,b,\*</sup> and Samantha Hocking<sup>c,d,e,\*\*</sup>

<sup>a</sup>Western Sydney University, Macarthur Clinical School, Campbelltown, NSW, 2560, Australia <sup>b</sup>Camden and Campbelltown Hospitals, Campbelltown, NSW, 2560, Australia <sup>c</sup>Charles Perkins Centre, University of Sydney, Sydney, NSW, 2006, Australia <sup>d</sup>Central Clinical School, Faculty of Medicine and Health, University of Sydney, Sydney, NSW, 2006, Australia <sup>e</sup>Royal Prince Alfred Hospital, Camperdown, NSW, 2050, Australia

Worldwide about 537 million adults live with diabetes, and this number is expected to rise to 783 million by 2045.<sup>1</sup> Type 2 diabetes (T2D) accounts for approximately 90% of cases and is more common among marginalised groups in any society. Thus, reducing health inequities in the delivery of diabetes care must be a priority for all governments. Over the past decade, the focus for the management of T2D has shifted from reducing dysglycemia to a more upstream approach, targeting therapies with proven benefits in reducing cardiorenal disease, in particular SGLT-2 inhibitors (SGLT2i) and GLP-1 receptor agonists (GLP-1 RA), and focussing on weight management given the contribution of obesity to the pathogenesis of T2D. This approach has been adopted in both Diabetes Society guidelines<sup>2,3</sup> and Cardiac Society guidelines.<sup>45</sup>

In this issue of The Lancet Regional Health-Americas, Rodriguez and colleagues have highlighted ethnic disparities in the dispensing of SGLT2i and GLP-1 RA in over 600,000 patients with T2D across six large not-forprofit care delivery systems in the United States.6 Their findings that the dispensing of SGLT2i was lower for American Indian/Alaska Native, Black and Hispanic compared to White individuals, and that GLP-1 RA was lower for all ethnic groups compared to White populations is concerning given these ethnic minoritised populations are more likely to have established cardiorenal disease.7 Furthermore, ethnic disparities in the dispensing of SGLT2i and GLP-1 RA persisted in insured, Medicare and Medicaid populations, suggesting that cost barriers did not account for these dispensing patterns. However, the lack of data on medication out-of-pocket costs in this analysis prevents further evaluation of the importance of financial barriers. This raises the important question of why these disparities in dispensing occur and what the underlying drivers might be. It is known that participants

DOI of original article: https://doi.org/10.1016/j.lana.2024.100759

of non-white ethnicities are disproportionally enrolled on disease prevalence in randomised clinical trials of T2D therapies, a trend that is not improving temporally in the United States.<sup>8</sup> It is possible that a lack of data regarding efficacy, or perhaps more importantly, tolerability and adverse effects, may be driving a lower confidence in prescribing to minoritised groups.

Data from the accompanying paper were collected between 2014 and 2022, so a proportion of the data collected for this study predates national and international guideline support for cardiorenal protection in T2D with SGLT2i and GLP-1 RA.6 As some of these agents now have FDA-approved indications beyond improving glycaemic control in T2D, the hope is that prescribing practices will change in the near future. Also, the availability of GLP-1 RA changed during the study period, with the addition of a once-weekly preparation option to the currently available ones, once- and twice-daily GLP-1 RA. The acceptability of once weekly compared to more frequently administered GLP-1 RA may influence future prescribing patterns, including to ethnic minoritised populations. Importantly, the cost of these agents is likely to continue to influence prescribing practices for some time unless lower drug prices can be negotiated, or more affordable generic preparations become available.9 The widespread use of GLP-1 RA and more recently GLP-1/ GIP dual agonists for the management of T2D and obesity has created a huge surge in demand, creating access issues due to a worldwide shortage.

The results from this study are in stark contrast to data from New Zealand, where having Maori and/or Pacific ethnicity (irrespective of the presence of cardiorenal disease) was included as a special authority criterion for gaining access to subsidised SGLT2i and GLP-1 RA for T2D. This was a deliberate decision to reduce inequities for Māori and Pacific peoples with T2D who suffer a shorter life expectancy than their non-Māori and non-Pacific (nMnP) counterparts. The result was a much greater proportion of Māori and Pacific peoples (12-20% more) being initiated on SGLT2i/GLP-1 RA than their nMnP peers.<sup>10</sup> This assertive approach to reducing inequities in medication access for ethnic minoritised populations is an exemplar to other countries. There should be a push for greater availability and subsidy for these agents, particularly in minoritised





The Lancet Regional Health - Americas 2024;34: 100784 Published Online xxx https://doi.org/10. 1016/j.lana.2024.

100784

<sup>\*</sup>Corresponding author. Western Sydney University, Macarthur Clinical School, Campbelltown, NSW, 2560, Australia.

<sup>\*\*</sup>Corresponding author. Charles Perkins Centre, University of Sydney, Sydney, NSW, 2006, Australia.

E-mail addresses: m.piya@westernsydney.edu.au (M.K. Piya), samantha.hocking@sydney.edu.au (S. Hocking).

<sup>© 2024</sup> The Authors. Published by Elsevier Ltd. This is an open access article under the CC BY-NC license (http://creativecommons.org/ licenses/by-nc/4.0/).

ethnic populations where cardiorenal risk is often higher than White populations.<sup>7</sup>

While SGLT2i and GLP-1 RA are considered 'newer' agents, some of the drugs in these classes have been available for the management of T2D for over a decade. Despite this, medication costs remain high, access issues persist and the use of these agents in ethnic minoritised populations does not match the prevalence of T2D and cardiorenal disease. This paper from Rodriguez and colleagues should be a call to action. We cannot allow for an increasing disparity of health outcomes in people with T2D based on race or ethnicity.

## Contributors

All authors contributed equally to conceptualisation and writing.

## Declaration of interests

MKP has received honoraria for advisory boards and speaking as well as support to travel to conferences from Novo Nordisk Pharmaceuticals Pty Limited, Eli Lilly Australia Pty Limited, iNova Pharmaceuticals Australia Pty Limited, Takeda Pharmaceuticals Australia Pty Ltd, and Johnson and Johnson Medical Pty Ltd. SH has received honoraria for advisory boards and speaking as well as support to travel to conferences from Novo Nordisk Pharmaceuticals Pty Limited, Eli Lilly Australia Pty Limited, iNova Pharmaceuticals Australia Pty Limited, Astra Zeneca Australia, Servier Australia and Sanofi Australia.

## References

Ahmad E, Lim S, Lamptey R, et al. Type 2 diabetes. Lancet. 2022;400(1803–1820). https://doi.org/10.1016/S0140-6736(22)01655-5.

- American Diabetes Association. Professional practice committee. 9. Pharmacologic approaches to glycemic treatment: standards of care in diabetes—2024. *Diabetes Care*. 2023;47(Supplement\_1):S158– S178.
- 3 Management of Hyperglycemia in Type 2 Diabetes, 2022. A consensus report by the American diabetes association (ADA) and the European association for the study of diabetes (EASD). *Diabetes Care.* 2022;45(11):2753–2786. https://doi.org/10.2337/ dci22-0034.
- 4 Das SR, Everett BM, Birtcher KK, et al. 2020 expert consensus decision pathway on novel therapies for cardiovascular risk reduction in patients with type 2 diabetes: a report of the American college of cardiology solution set oversight committee. J Am Coll Cardiol. 2020;76(9):1117–1145. https://doi.org/10.1016/j.jacc.2020.05.037.
- 5 Grant PJ, Cosentino F. The 2019 ESC guidelines on diabetes, prediabetes, and cardiovascular diseases developed in collaboration with the EASD: new features and the 'ten commandments' of the 2019 guidelines are discussed by professor peter J. Grant and professor francesco cosentino, the task force chairmen. *Eur Heart J.* 2019;40(39):3215–3217.
- 6 Rodriguez L, Finertie H, Neugebauer RS, et al. Race and ethnicity and pharmacy dispensing of SGLT2i and GLP-1 RAs in type 2 diabetes. *Lancet Reg Health Am.* 2024;34:100759.
- 7 Ferdinand KC, Rodriguez F, Nasser SA, et al. Cardiorenal metabolic syndrome and cardiometabolic risks in minority populations. *Cardiorenal Med.* 2014;4(1):1–11. https://doi.org/10.1159/000357236.
- 8 Li G, Zhang J, Van Spall HGC, et al. Exploring ethnic representativeness in diabetes clinical trial enrolement from 2000 to 2020: a chronological survery. *Diabetologia*. 2022;65:1461–1472. https://doi. org/10.1007/s00125-022-05736-z.
- 9 Karagiannis T, Bekiari E, Tsapas A. Socioeconomic aspects of incretin-based therapy. *Diabetologia*. 2023;66(10):1859–1868. https://doi.org/10.1007/s00125-023-05962-z.
- 10 Paul R, Keenan R, Rodrigues M, et al. Inclusion of ethnicity in special authority criteria improves access to medications for Maori and Pacific peoples with type 2 diabetes. N Z Med J. 2023;136(1574):93–97.