

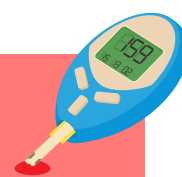
# Risk Factors associated with all-cause and cardiovascular mortality among New Zealand Europeans and South Asians with Type 2 diabetes over 25 years in Auckland



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## Introduction

- Type 2 diabetes (T2DM) is a rising burden globally [1].
- In New Zealand, T2DM affects approximately 250,000 people [1] with a substantial impact on public health and healthcare utilisation.
- Higher mortality and poorer health outcomes have been reported in South Asians with diabetes.



## Analysis

- Conditional logistic regression models were used to compute odds ratios for all-cause and cardiovascular death.



## Aims

- To compare the risk of all cause and cardiovascular deaths in a primary-care cohort between Europeans and South Asians residing in New Zealand.
- Higher mortality and poorer health outcomes have been reported in these populations with diabetes and it also aims to identify current drivers of such disparities.



## Methods

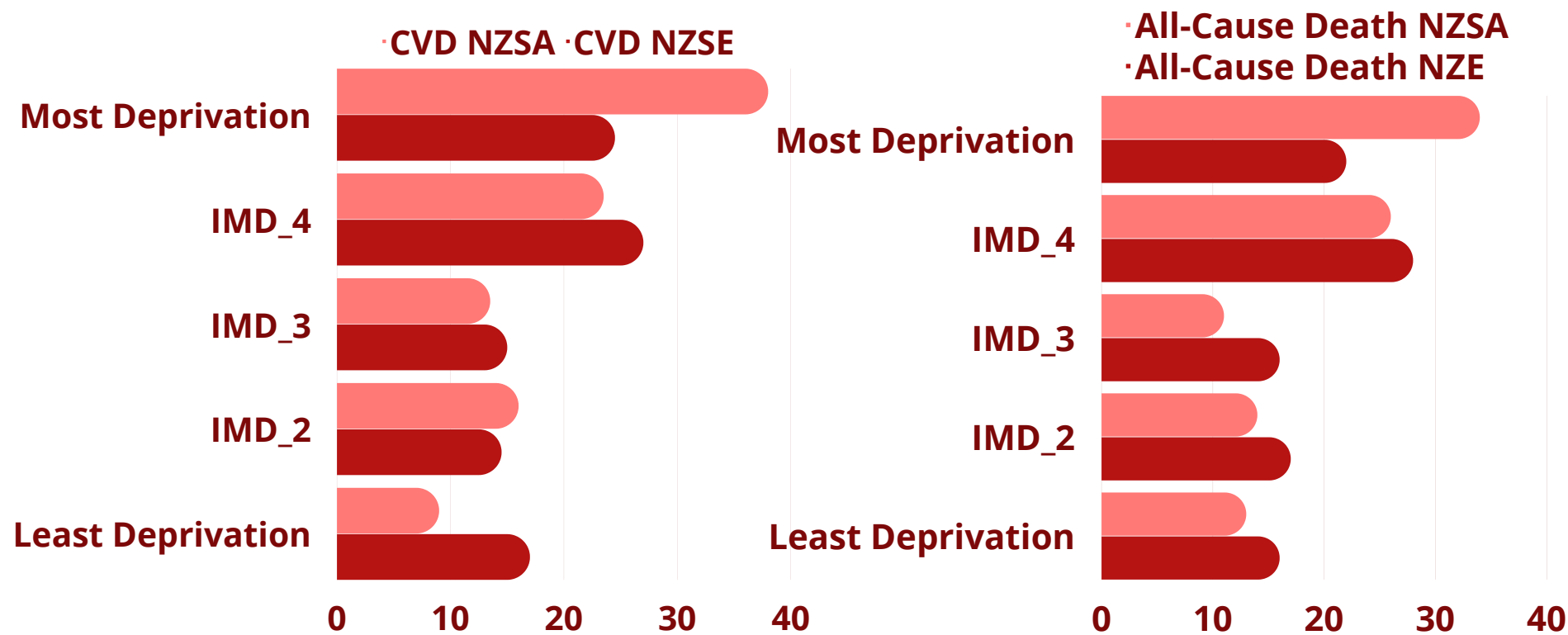
- Two-population based case-control studies consisting of South Asians (NZSA) and Europeans (NZE) enrolled in the Diabetes Care Support Service (DCSS) in Auckland, NZ between 1994-2018.
- DCSS is a 25 yearlong audit of diabetes patients attending primary care across the city of Auckland.

## Results

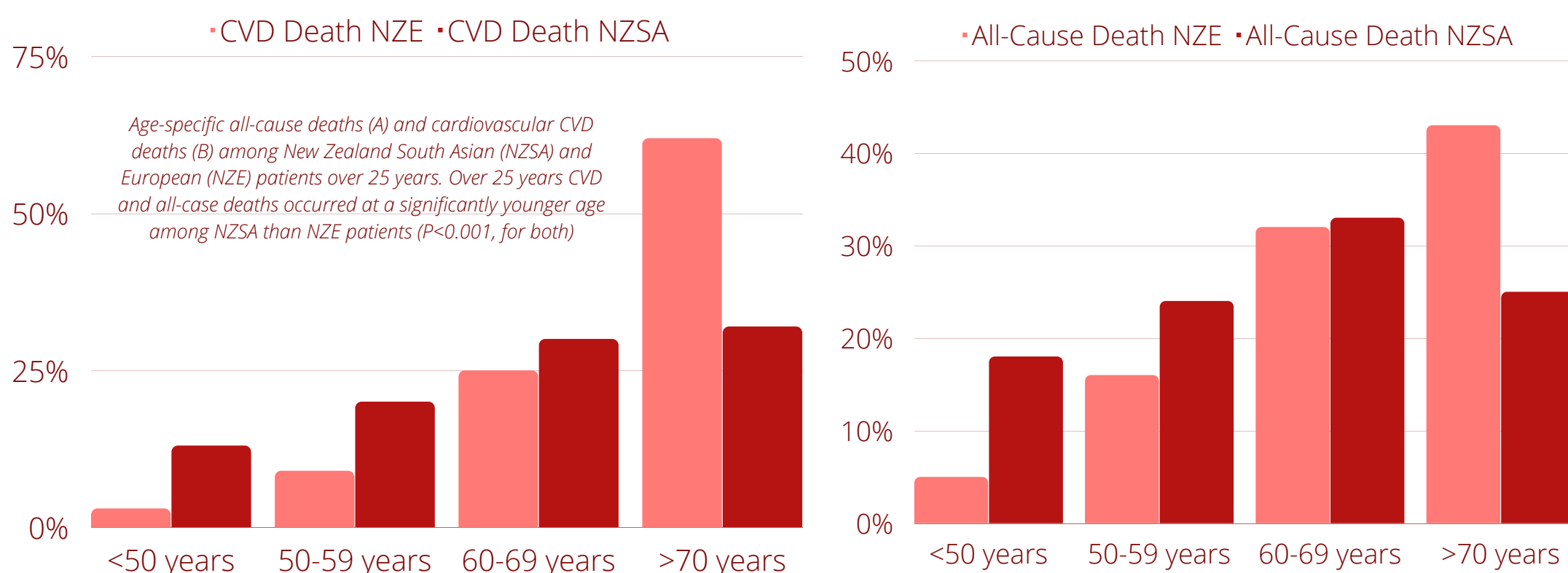
- All cause deaths, n=3959 and CVD deaths, n=1349)
- NZSA had similar CVD death but lower all-cause deaths (6.6%) than NZE (9.4%) with a higher proportion prescribed lipid lowering agents, use of which was associated with reduced risk for all-cause death (adjusted odds ratio: 0.51, 95%CI 0.39-0.66).

## Conclusions

- Among people with T2DM, NZE have higher all-cause mortality than NZSA.
- Low socioeconomic status was the strongest predictor of all-cause and cardiovascular deaths.
- Further research is needed to understand these disparities and whether use of the new pharmaceutical agents will reduce this gap.



Percentage of cases by socioeconomic status for New Zealand South Asian (NZSA) and European (NZE) patients in the all-cause death and cardiovascular (CVD) death cohorts. IMD=index of multiple deprivation. NZSA cases had more deprived patients than NZE in both the all-cause (P=0.002) and CVD death cohorts (P<0.001) over 25 years



## References

1. Futureofhealth.govt.nz. 2022. Manatū Hauora (Ministry of Health) | Future of health. [online] Available at: <<https://www.futureofhealth.govt.nz/ministry-of-health-manatu-hauora/>>
2. KJ, C., SJ, D., JA, C., RA, S. and TA, S., 2022. The cost of diabetes-related hospital care to the Southern District Health Board in 2016/17. [online] PubMed. Available at: <<https://pubmed.ncbi.nlm.nih.gov/31647793/>>.