
COMPARING SELF-REPORTED RATES OF NON-COMMUNICABLE DISEASES (NCD) AMONG PEOPLE SELF IDENTIFYING AS LIVING WITH A DISABILITY TO THE BROADER POPULATION

NATHAN ZACHARIE & CHRISTOPHER GAUTHIER-COLES

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INTRODUCTION

- Several epidemiological studies have demonstrated that people living with disability may be at higher risk of being affected by an underlying condition(s). [1] [2]
- It is estimated that 12% of Vanuatu's population are living with disability [3]
- Here we evaluate the self-reported rates of non-communicable diseases (NCDs) such as hypertension and diabetes among COVID19 vaccine recipients living with a disability and compare these to self-reported rates among the broader population.
- This research aims to better understand the increased disease burden experienced by people living with disability



METHODS

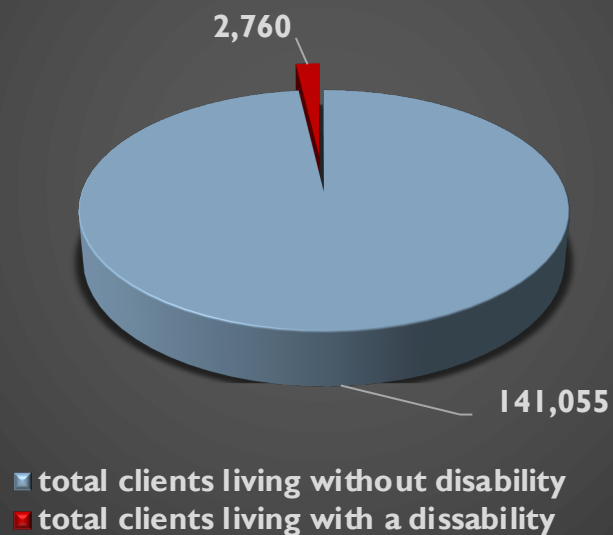
- The data source was Vanuatu's COVID-19 electronic vaccination registry which was implemented in 2021 to support the implementation of the COVID19 vaccination program.
- The registry contains key health-related information of COVID19 vaccine recipients such as disability as well as incidence of NCDs affecting recipients, specifically, hypertension, diabetes, asthma, cardiac issues, and kidney disease. This information was self-reported and reviewed by a clinician as part of the registration process.
- A total of 143,815 adult vaccine client registrations (registered between June 2021 and October 2022) were extracted and de-identified. We analyzed the number of people who have indicated living with a disability who also reported having at least one NCD and compare these figures with the incidence of NCD among the broader population.



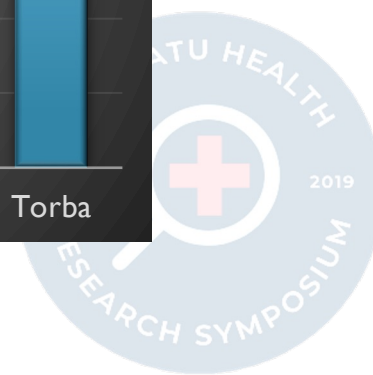
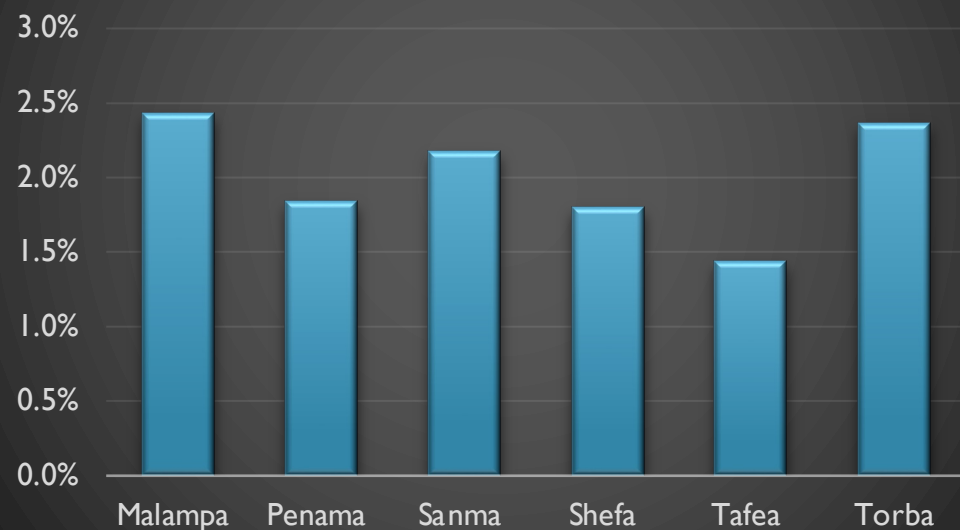
RESULTS

During the COVID19 vaccination campaign approximately 2% of clients self-identified as living with disability during the registration process

Proportion of vaccine recipients self-identifying as living with disability in Vanuatu

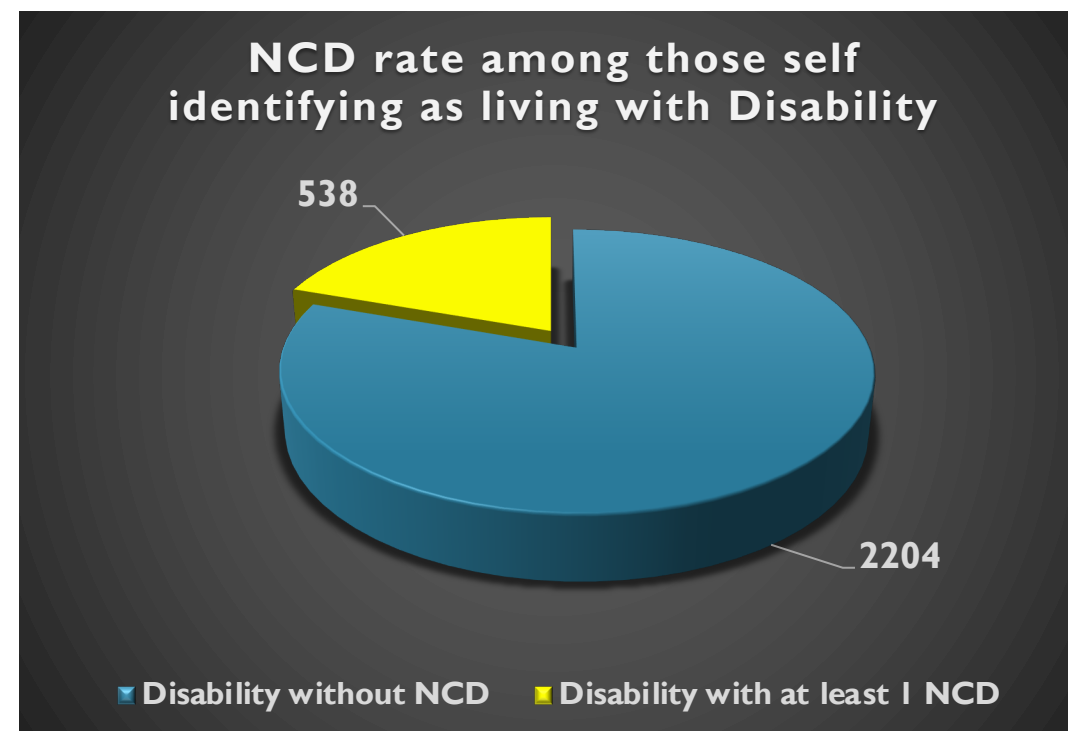
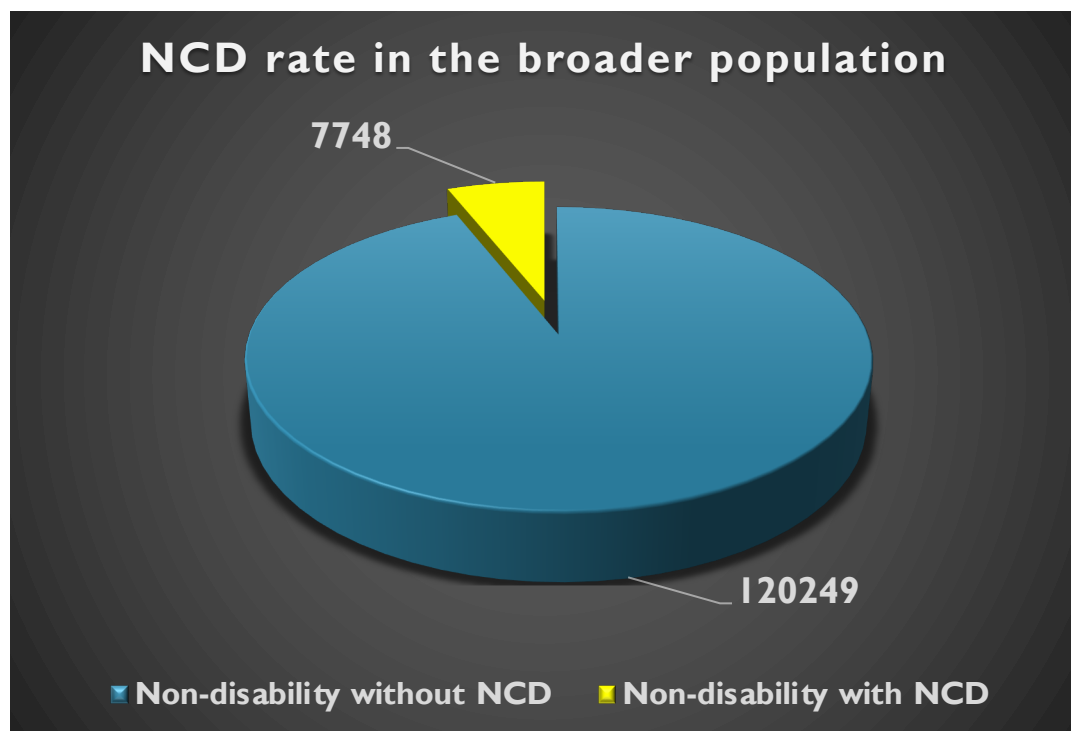


Proportion of vaccine recipients self-identifying as living with disability by province



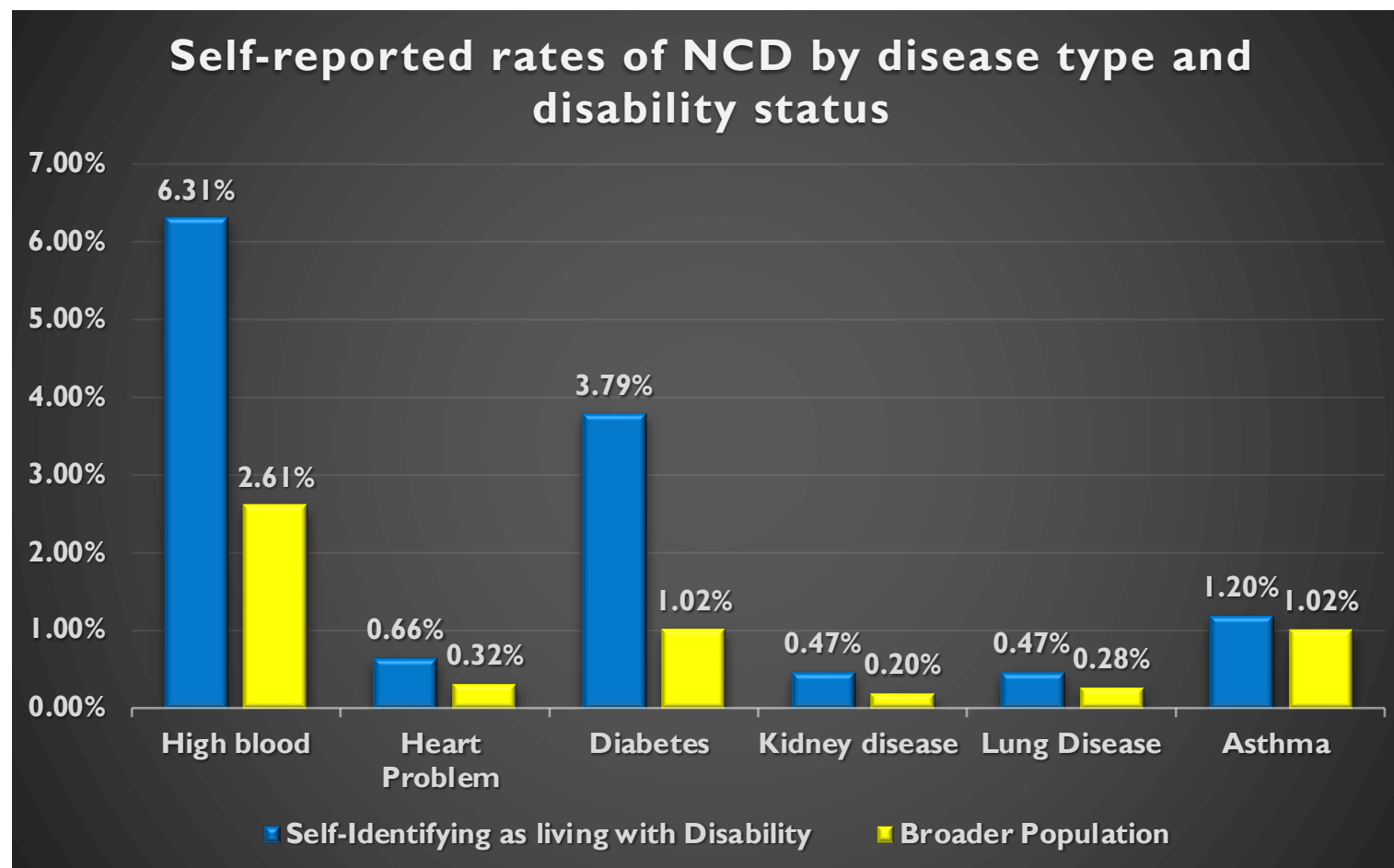
RESULTS

- Of the client registrations analyzed, 2,742 (2%) reported living with a disability. Among these, 20% (538) also self-reported having at least one NCD. In contrast, only 6% of the broader population self-reported having at least one NCD. The rate of NCD is therefore more than 3 times higher for those with disability.



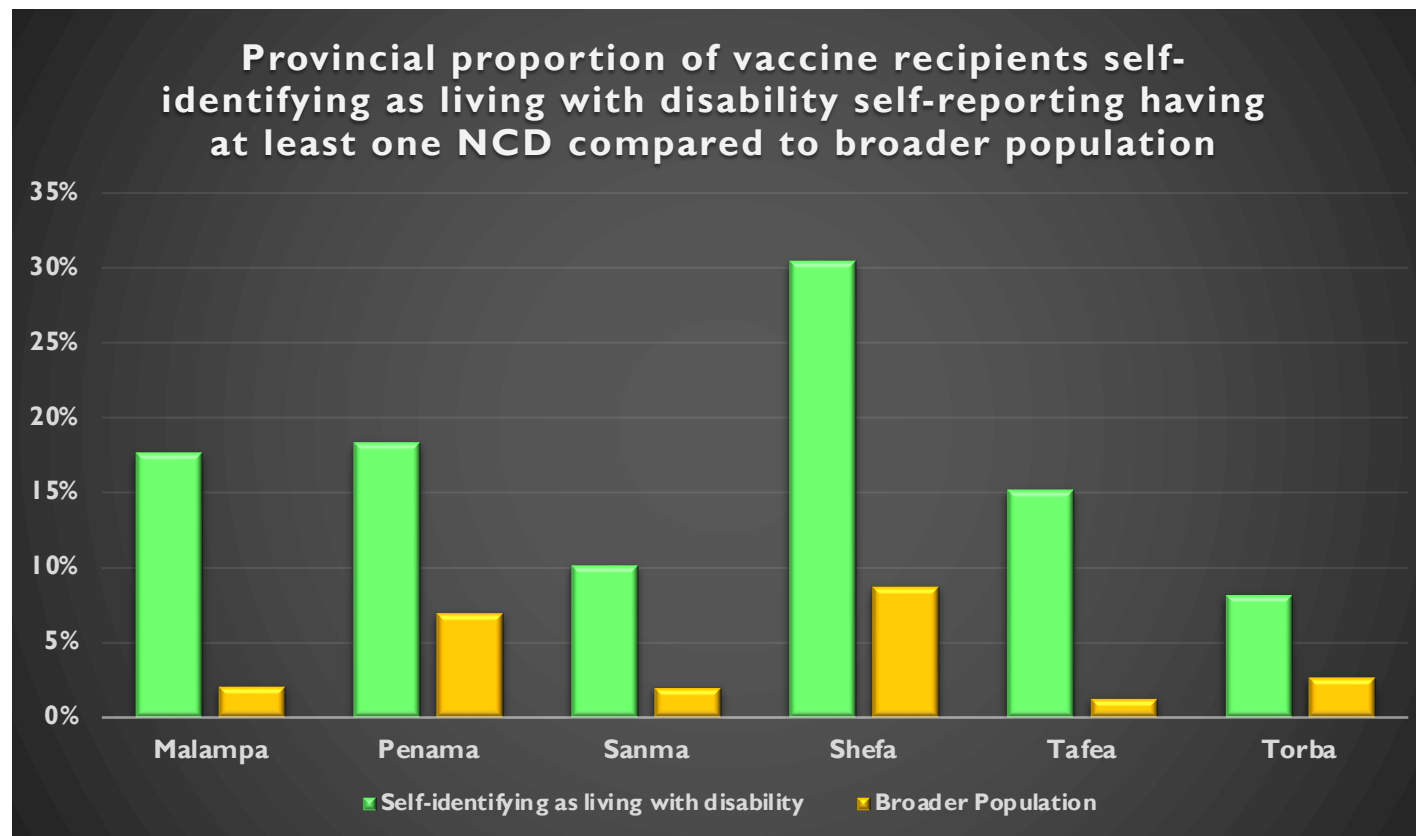
RESULTS

- There was significant difference in the rate of NCD self reporting between disease types in people self-identifying as living with disability compared to broader population. Diabetes has the highest difference with 3.7 times greater likelihood of being self-reported by people with disability. Asthma has the smallest difference with only 1.2 times greater likelihood of being self reported.



RESULTS

- There were significant differences between provinces in terms of the rate of self-reported NCDs of people living with disability and the broader population.
- These differences indicate that the screening of NCDs for people living with disability as well as the broader population is not uniform across Vanuatu



DISCUSSION

- Self-reported rates of NCDs among people who self-identified as living with disability is on average 3 times higher compared to people not living with disability. This data strongly suggests that people living with a disability in Vanuatu have a higher disease burden compared to the broader population.
- There was significant underreporting of both underlying condition and disability status during client registration.
- People living with disability may have better access to NCD screening compared to broader population
- It is unclear to what extent, the link between NCDs and disability is correlational or causal in nature.



RECOMMENDATIONS / IMPLICATIONS

- We call for better awareness of higher NCD risk among people living with disability to improve health outcomes of this vulnerable group
- We call for strengthening ties between key stakeholders (VSPD, MoH, NGOs)
- Future research could look at doing a clinical diagnostic study of NCD prevalence in order to determine the rate of under-reporting of NCDs among people living with disability
- Future research could also investigate the interplay between NCDs and disability in terms of causality vs correlation



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REFERENCES

- [1] J. E. Prynne and H. Kuper, "Perspectives on Disability and Non-Communicable Diseases in Low- and Middle-Income Countries, with a Focus on Stroke and Dementia," *International Journal of Environmental Research and Public Health*, vol. 16, no. 18, p. 3488, 2019. [Online]. Available: <https://www.mdpi.com/1660-4601/16/18/3488>.
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