

The association between alcohol use and chronic diseases' treatment outcomes among adults aged 40 years and above in rural South Africa



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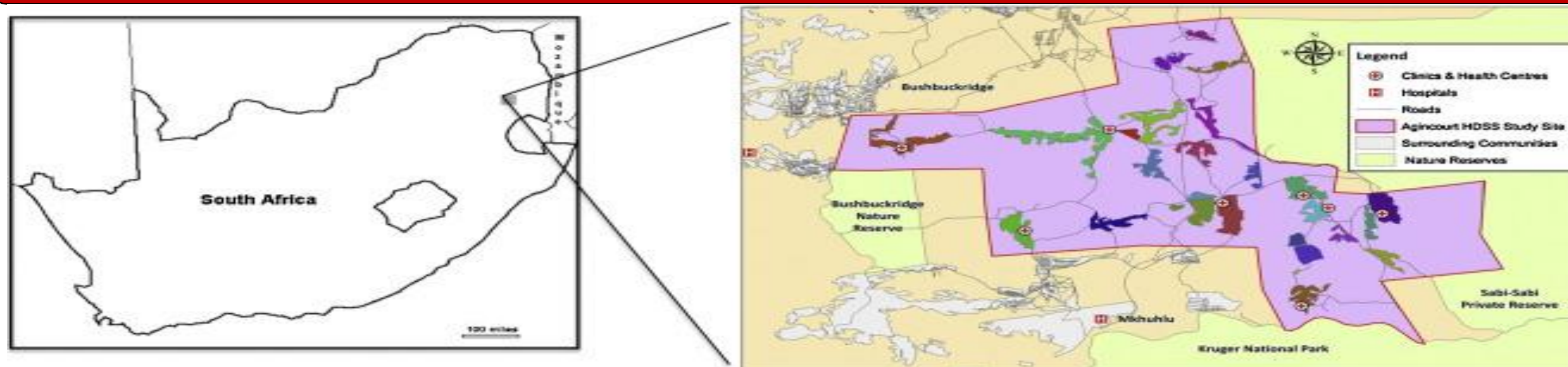
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The prevalence of optimal treatment outcomes was highest for HIV and low for hypertension and DM. Reported alcohol use was not associated with treatment outcomes of chronic diseases possibly due to under-reporting.

BACKGROUND AND AIM

- HIV, hypertension and diabetes are significant problems causing mortality in South Africa.
- Rates of control of chronic diseases are still low in South Africa despite advances in treatment.
- In South Africa, with alcohol use being generally accepted in some social norms, it is often under-recognized and has been poorly understood in relation to poor treatment outcomes of chronic conditions.
- There is limited data in South Africa on alcohol use and treatment outcomes of chronic diseases in older people.
- We explored the association between alcohol use and chronic diseases (HIV, hypertension, and diabetes mellitus) treatment outcomes among adults aged 40 years and above in a rural South African setting.

METHODS



- We analysed data from wave 1 of the **Health and Ageing in Africa-a longitudinal Study in an INDEPTH community (HAALSI)** study conducted among adults aged 40 years and above in rural Mpumalanga, South Africa.
- Data collection included socioeconomic and clinical data, self-reported alcohol use in the last 30 days, anthropometry, point-of-care blood glucose levels, blood pressure, and HIV viral load levels.
- We performed descriptive analysis to determine the prevalence of optimal chronic diseases' treatment outcomes (suppressed HIV viral load, normal blood pressure and normal blood sugar)
- We multivariate **modified Poisson regression** to determine the association between alcohol use and chronic diseases' treatment outcomes.

RESULTS

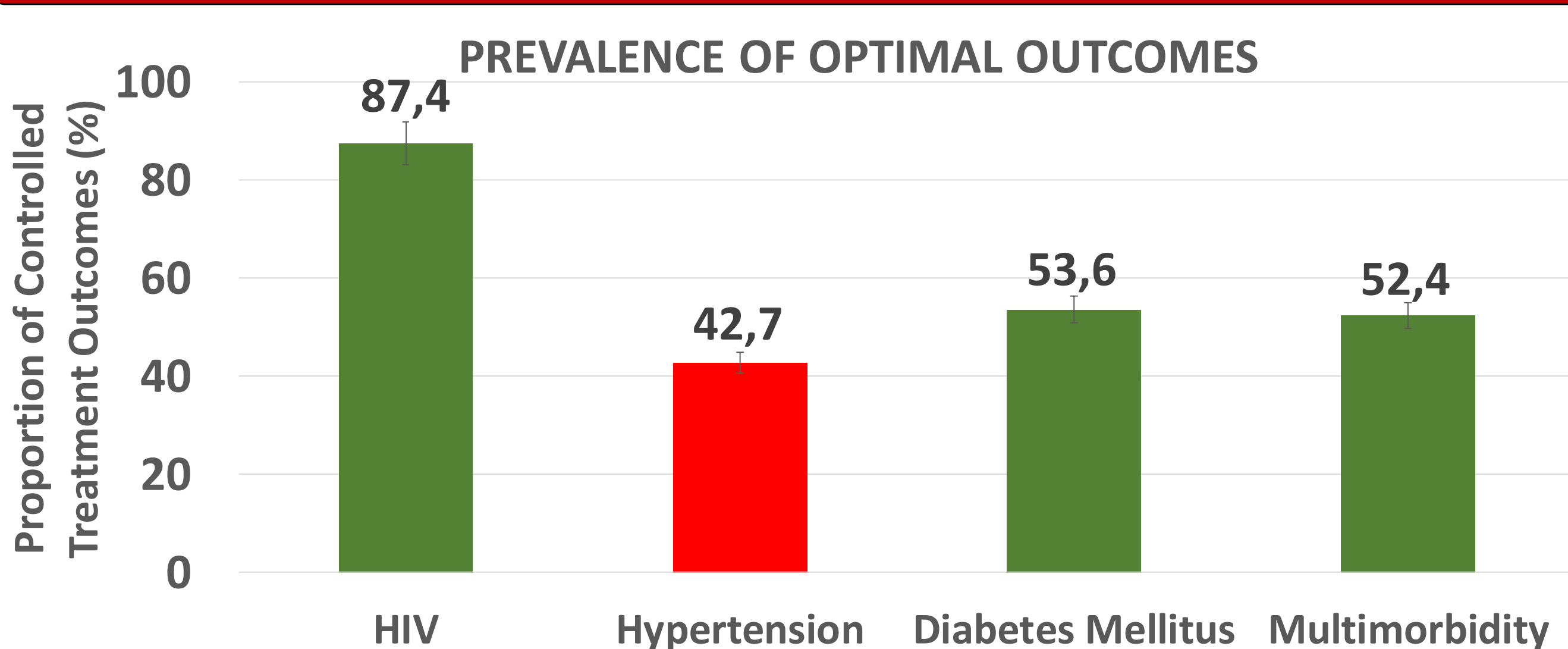
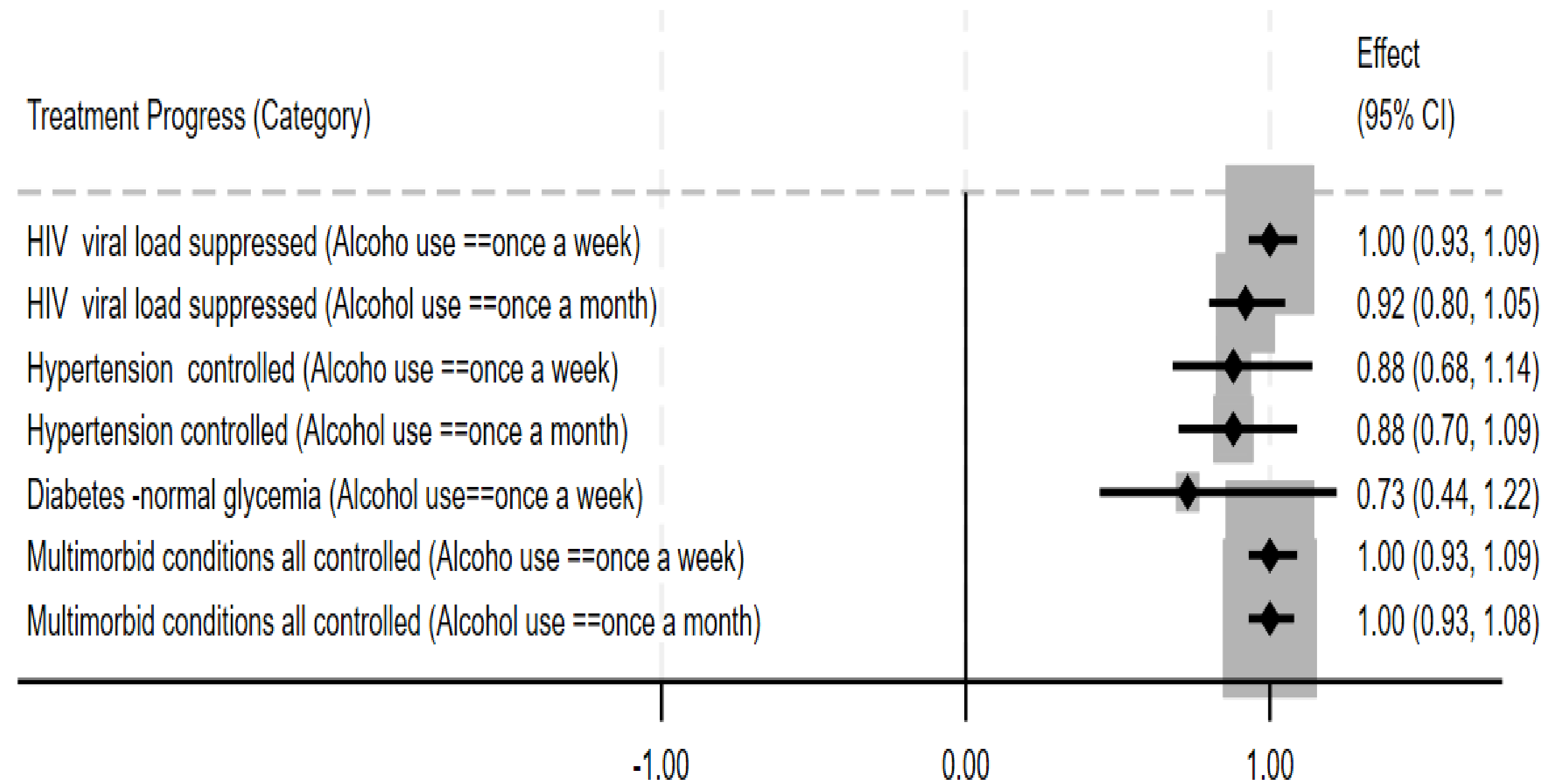


Figure 1: Prevalence of HIV viral load suppression, controlled (glycemia and blood pressure) and optimal outcomes for those with multimorbidity

RESULTS CONTINUED

- Alcohol use **did not negatively impact optimal treatment outcomes** for HIV (aRR=1.00, 95%CI:0.93-1.09), hypertension (aRR=0.88, 95%CI:0.68-1.14), diabetes mellitus (aRR=0.73, 95%CI:0.44-1.22), and multimorbidity (aRR=1.00, 95%CI:0.93-1.09).

Figure 2: Forest plot showing association between alcohol use and HIV viral load suppression, controlled hypertension, controlled glycemia and controlled multimorbid conditions



CONCLUSION & RECOMMENDATIONS

- Prevalence of optimal treatment outcomes was highest for HIV and low for NCDs (hypertension and diabetes mellitus)
- Reported alcohol use is not associated with chronic diseases' treatment outcomes (HIV, hypertension, diabetes mellitus and multimorbidity).
- This is possibly due to underreporting of alcohol use in the aging population.

RECOMMENDATIONS

- Strengthen management of NCDs** by adopting strategies implemented in HIV management
- An urgent **need to optimize treatment outcomes** of chronic diseases to reduce morbidity and mortality in sub-Saharan Africa
- Utilise more **objective alcohol use measurements** in chronic disease care settings.

ADDITIONAL KEY INFORMATION

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Conflicts of Interest: All authors declare no competing interests

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