

# Urban–rural disparities in Cardiovascular risk, lifestyle, and psychosocial burden among Cardiac Outpatients

Mahmoud HT., Dario M.L., Merotto D., Mahmoud MM., Visentin P., Dal Bo A., Cordiano R., Selvestrel E., Berton G.

## INTRODUCTION & AIM

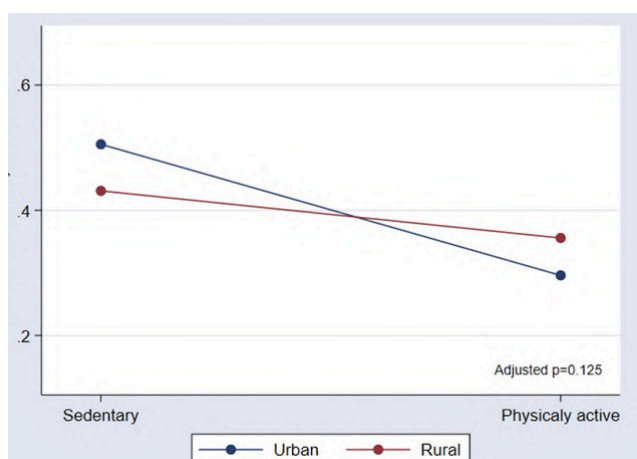
- Geographical factors may influence cardiovascular risk, lifestyle behaviors, and psychosocial stress.
- Data on urban–rural disparities in Italian outpatient cardiology populations remain limited.
- To compare cardiovascular risk factors, physical activity, psychosocial stress, and pharmacological treatment between urban and rural cardiovascular outpatients in Veneto.

## METHODS

- **Cross-sectional** study
- **649 consecutive** cardiovascular outpatients enrolled (urban n=169; rural n=480)
- Data included age, sex, SBP, DBP, hypertension, diabetes mellitus, physical activity, psychosocial stress, and use of antihypertensive or psychotropic drugs
- Multivariable linear and logistic regression models used to assess independent associations

## RESULTS

- Urban and rural patients had similar SBP ( $147.6 \pm 21.8$  vs  $146.3 \pm 22.7$  mmHg,  $p=0.507$ ) and DBP ( $81.6 \pm 11.4$  vs  $81.6 \pm 11.1$  mmHg,  $p=0.931$ )
- Prevalence of hypertension (51.5% vs 55.6%,  $p=0.352$ ), diabetes (9.5% vs 11.0%,  $p=0.568$ ), physical activity (63.9% vs 62.5%,  $p=0.746$ ), and psychosocial stress (36.7% vs 38.5%,  $p=0.669$ ) did not differ significantly between groups
- Multivariable analyses confirmed that **rural residence was not independently associated** with cardiovascular risk factors, lifestyle, or stress
- Physical activity was independently associated with **lower stress** (OR 0.39; 95% CI 0.20–0.76;  $p=0.006$ ), with no significant interaction by area of residence



## CONCLUSIONS

- No urban–rural gap: Patients in both settings had **similar cardiovascular and psychosocial** profiles, suggesting equitable care and access.
- Physical activity & stress: **Regular activity** was linked to lower stress in both groups, making it an important modifiable factor.
- Clinical implication: Outcomes aren't determined by location alone, so preventive, lifestyle-based interventions should be promoted for all patients.

**Acknowledgments:** we would like to thank AULSS 2 Marca Trevigiana (Veneto Region, Italy) for its institutional support and Noi x Noi Associazione di Mutuo Soccorso ETS with Banca Prealpi SanBiagio Credito Cooperativo (Tarzo, Treviso, Italy).