Ethnic difference in the prevalence of angina pectoris in Sami and non-Sami populations: the SAMINOR study

Bent-Martin Eliassen1, Sidsel Graff-Iversen2, Marita Melhus1, Maja-Lisa Løchen1, Ann Ragnhild Broderstad1

1Centre for Sami Health Research, University of Tromso - The Arctic University of Norway, Norway, bentmartin.eliassen@uit.no; 2Norwegian Institute of Public Health, and Department of Community Medicine, University of Tromso - The Arctic University of Norway, Norway, 3Department of Community Medicine, University of Tromso - The Arctic University of Norway, Norway

Objective

To assess the population burden of angina pectoris symptoms (APS), self-reported angina and a combination of these, and explore potential ethnic disparity in their patterns. If differences in APS were found between Sami and non-Sami populations, we aimed at evaluating the role of established cardiovascular risk factors as mediating factors.

Design

Cross-sectional population-based study.

Methods

A health survey was conducted in 2003–2004 in areas with Sami and non-Sami populations (SAMINOR). The response rate was 60.9%. The total number for the subsequent analysis was 15,206 men and women aged 36–79 years (born 1925–1968). Information concerning lifestyle was collected by 2 self-administrated questionnaires, and clinical examinations provided data on waist circumference, blood pressure and lipid levels.

Results

This study revealed an excess of APS, self-reported angina and a combination of these in Sami relative to non-Sami women and men. After controlling for age, the odds ratio (OR) for APS was 1.42 (p<0.001) in Sami women and 1.62 (p<0.001) for men. When including relevant biomarkers and conventional risk factors, little change was observed. When also controlling for moderate alcohol consumption and leisure-time physical activity, the OR in women was reduced to 1.24 (p=0.06). Little change was observed in men.

Conclusion

This study revealed an excess of APS, self-reported angina and a combination of these in Sami women and men relative to non-Sami women and men. Established risk factors explained little or none of the ethnic variation in APS. In women, however, less moderate alcohol consumption and leisure-time physical activity in Sami may explain the entire ethnic difference.

References