ASSOCIATION OF NEIGHBOURHOOD SOCIOECONOMIC STATUS AND INDIVIDUAL SOCIOECONOMIC STATUS WITH CARDIOVASCULAR RISK FACTORS IN AN EASTERN GERMAN POPULATION - THE CARLA STUDY 2002–2006

Introduction/objectives Individual socioeconomic status (SES) is a determinant of cardiovascular risk factors (RF). Recent studies suggest an independent association of neighbourhood SES with cardiovascular RF, but the mechanisms have not fully been understood. Our aim was to assess the association of neighbourhood and individual SES with cardiovascular RF in an Eastern German population.

Methods We used cross-sectional data of 1779 participants aged 45–83 years of the population-based CARLA study. We calculated linear mixed models to assess the age-adjusted influence of neighbourhood-specific unemployment rates and individual SES on smoking, systolic blood pressure (SBP), and body mass index (BMI). Spatial dependencies within and between neighbourhoods were adjusted for using ICAR models.

Results Neighbourhood-specific unemployment rates varied between 6.3 and 55.3%. Per 1% increase in the neighbourhood’s unemployment rate, the number of cigarettes smoked/day increased by 0.11 in men (95% CI 0.09 to 0.12) and 0.05, (CI 0.04 to 0.07) in women. In women, SBP increased by 0.04 mm Hg with unemployment rate (CI 0.03 to 0.06), while there was no statistically significant association of SBP with SES in men. BMI was only in women significantly associated with unemployment (increase in BMI per 1% increase in unemployment rate 0.04 (CI 0.02 to 0.05)). Associations of RF with individual SES were stronger than with neighbourhood SES in multiple models.

Conclusions Our findings confirm the previously described association of neighbourhood SES with smoking independent of individual SES, while we found inconsistent associations with SBP and BMI. The neighbourhood environment may be more relevant for behavioural than for biomedically risk factors.

SCREENING OF LUNG FUNCTION DISORDERS AMONG SMOKERS IN PRIMARY HEALTHCARE: A RUSSIAN STUDY

Introduction Smoking is the main risk factor for chronic obstructive pulmonary disease (COPD). The prevalence of smoking in Russian Federation is one of the highest in the world. Many cases of COPD remain undiagnosed; therefore screening of COPD is an important task of the primary healthcare service. This study aims to estimate lung function disorders among smoking in primary healthcare in Northwest Russia.

Methods Altogether, 414 individuals, both smokers (89%) and ex-smokers (11%) were invited and filled out questionnaires on smoking status and symptoms of COPD. Carboxyhaemoglobin (COHb%) and COppm were measured with a smokelyzer. A standardised pulmonary function test with bronchodilator for detection of bronchial obstruction was performed in smokers and ex-smokers, and patients with symptoms.

Results Mean age in the sample was 42.1 years (62.5% were males). The average smoking history was 25 pack-years for men and 14.8 pack-years for women. High level of COHb (>3%) was detected in 35.9% of smokers. Linear regression analysis revealed positive association between CO and the number of cigarettes smoked per day (p<0.001). 75.4% had symptoms (cough, sputum and dyspnea). COPD was detected in 25 individuals (6%). [COPD I in 11; COPD II in 13 and COPD III in four individuals].

Conclusion Screening for COPD among smokers seems to be beneficial for early detection of COPD.