Epidemiology (Sunnyvale), 6:5(Suppl)
http://dx.doi.org/10.4172/2161-1165.C1.015

SOCIAL INEQUALITIES IN THE INCIDENCE OF CORONARY HEART DISEASE AND STROKE IN EUROPE: TESTING THE DIFFERENTIAL VULNERABILITY HYPOTHESIS

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Social inequalities constitute a relevant topic in the epidemiology literature. Recent research questioned whether social position interacts with risk factors, exacerbating their unfavourable effects, under a "differential vulnerability" mechanism When measured on an additive scale such as the absolute risk of event, the interaction between social class and risk factors provides valuable information on which subgroups in the population may benefit most by preventive strategies. However, this important mechanism has been under-investigated so far, as large prospective studies are needed to provide precise interaction estimates. We tested the differential vulnerability hypothesis in incident coronary heart disease and stroke using data from 11 populations in 9 European countries, all participating in the MORGAM collaborative project, with harmonized baseline and follow-up data. Overall, 77 918 men and women with 9334 incident events occurring during a median follow-up of 12 years. We found evidence that low education exacerbates the effect of cardiovascular disease risk factors on the absolute risk of coronary heart disease or stroke between the ages of 35 and 75, in individuals initially free of CVD. In men, this synergistic interaction was mainly driven by smoking; in women by clustering of smoking, elevated blood pressure and obesity. Standard survival analysis, ignoring competing risks, led to over-estimating the interaction between low education and risk factors, in particular smoking and body mass index. Our study calls for future research pursuing explanations for the differential vulnerability we demonstrated, such as the accumulation of psychosocial stressors and allostatic load among the socially disadvantaged over lifetime.

CREATINEPHOSPHOKINASE MB FRACTION (CK-MB) AS A EARLY CARDIAC MARKER IN PATIENTS INFECTED BY *TRYPANOSSOME CRUZI* IN BELÉM – PARÁ – BRASIL

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Chagas disease is anthropozoonosis caused by the protozoan *Trypanosome cruzi* (*T. cruzi*), mainly transmitted by insect vectors of the Reduviidae family. It is distributed throughout the Americas. It is estimated that in Brazil 25 million people live in risk areas and five million are infected. Creatinephosphokinase MB fraction has long been considered a marker for the diagnosis of myocardial injury, caused by this parasite. This study aims to evaluate the prognostic value in laboratory scope of CK- MB in patients diagnosed with *Trypanossome cruzi* infection. Transversal study where we selected 24 patients treated at health centers in Belem - Pará - Brazil , all with clinical signs and symptoms of infection by the parasite , infection confirmed by testing Enzyme Linked Immuno Sorbent Assay (ELISA) and testing haemagglutination Inhibition (HAI) . Was used for measurements of serum CK- MB in the method of Enzyme linked fluorescent assay (ELFA) by bioMérieux®. In 41.6 % of cases the CK- MB remained at normal levels < 5.0 µg / ml and in 58.4 % CK -MB is altered > 5.0ug / ml. In patients where the CK-MB was changed mainly seemed to be a direct relation of infection time, since this marker appears to have more sensitivity when the heart muscle is already showing necrosis, thus demonstrating a more advanced disease compared to patients that show normal rates. Creatinephosphokinase MB fraction apparently not presented with a good marker for the early diagnosis of myocardial injury.