

Residential distance to high-voltage power lines and risk of neurodegenerative disease: a Danish population-based case-control study

Deskripsi Lengkap: <https://lib.fkm.ui.ac.id/detail.jsp?id=102136&lokasi=lokal>

Abstrak

The aim of this study was to investigate the possible association between residential distance to high-voltage power lines and neurodegenerative diseases, especially Alzheimer's disease. A Swiss study previously found increased risk of Alzheimer's disease for people living within 50 m of a power line. A register-based case-control study including all patients diagnosed with neurodegenerative diseases during the years 1994-2010 was conducted among the entire adult population of Denmark. Using conditional logistic regression models, hazard ratios for ever living close to a power line in the time period 5-20 years before diagnosis were computed. The risks for developing dementia, Parkinson's disease, multiple sclerosis, and motor neuron disease were not increased in persons living within close vicinity of a power line. The risk of Alzheimer's disease was not increased for ever living within 50 m of a power line (hazard ratio = 1.04, 95% confidence interval: 0.69, 1.56). No dose-response according to number of years of living within 50 m of a power line was observed, but there were weak indications of an increased risk for persons diagnosed by the age of 75 years. Overall, there was little support for an association between neurodegenerative disease and living close to power lines.