

TRAFFIC DENSITY IN AREA OF RESIDENCE IS ASSOCIATED WITH PHYSICAL HEALTH-RELATED QUALITY OF LIFE IN WOMEN: THE COMMUNITY-BASED HORDALAND HEALTH STUDY

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Background and Aims: Vehicle traffic is increasing worldwide, and this is a major concern since traffic-related air pollution and noise may influence health. The aim of this study was to evaluate whether reduced health-related quality of life (HRQoL) among men and women is associated with increased vehicle traffic density in participants' area of residence.

Methods: A total of 16,410 individuals between the ages of 40 and 45 years from three municipalities in Hordaland County were asked to participate. The response rate was 55% for men and 66% for women. Vehicle traffic density in participants' area of residence was defined as low, moderate or high, with a maximum of 50,000 vehicles a day on the busiest roads. Using the SF-12 questionnaire, both physical and mental HRQoL were investigated in relation to vehicle traffic density.

Results: Linear regression analyses showed that women living in areas with high traffic density had significantly poorer physical HRQoL than women living in areas with moderate or low vehicle traffic density. There were no similar findings among men. Mental HRQoL was not associated with vehicle traffic density in the area of residence, neither for women nor for men.

Conclusion: There is an association between high vehicle traffic density in residential area and reduced HRQoL in women, but not in men.