TRENDS IN DEMENTIA INCIDENCE IN THE ROTTERDAM STUDY OVER THE PAST 20 YEARS

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Introduction: The prevalence of dementia is increasing due to ageing of the population. It is unclear whether incidence rates are changing too.

Aims: To investigate whether dementia incidence rates changed during the last two decades in the Netherlands.

Methods: This study was based on the Rotterdam study, a population-based cohort study. Participants were aged 60-90 and free from dementia at baseline. Participants entered the study in 1990 (RS-I, N=5727) or in 2000 (RS-II, N=1769) and contributed person-years for a maximum of 5 years. We calculated age-adjusted dementia incidence rates for the two cohorts in total, in 5-years age strata, and for men and women separately. We also compared differences in prevalence of vascular risk factors between 1990 and 2000.

Results: There were 306 incident dementia cases in RS-I after 26027 person-years, and 52 in RS-II after 8443 person-years. Age-adjusted dementia incidence rates were 5.5 (95% CI 4.5-6.8) for RS-I, and 4.3 (95% CI 3.1-5.8) for RS-II (p-value of the difference 0.086). In men, incidence rates were non-significantly lower in RS-II in all age strata. In women, incidence rates seemed higher in RS-II in the age strata between 65 and 75 years, and lower in the age strata above 75 years. The prevalence of vascular risk factors increased between 1990 and 2000. There was also a strong increase in medication use for treatment of vascular risk factors.

Conclusions: Despite an increase in vascular risk factors, dementia incidence rates did not increase, and even seemed to decrease over the past twenty years.