SENSITIVITY AND SPECIFICITY OF PARKINSON'S DISEASE DIAGNOSES IN THE SWEDISH HEALTH REGISTERS

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Introduction: Swedish health registers are excellent sources for unbiased population-based information in epidemiological studies. The Swedish National Patient Register covers all hospital discharges in Sweden since 1987 (with partial coverage since 1964) and the Cause of Death Register covers all deaths since 1961. It is, however, not known how accurate an indicator register-based information is for Parkinson's disease (PD).

Aim: To investigate the accuracy of PD captured in the Swedish health registers.

Methods: Sensitivity, specificity and positive and negative predictive values were calculated for PD diagnoses in the Swedish health registers. The gold standard was disease-specific clinical work-ups following a screening of more than 40,000 twins over the age of 50 in the Swedish Twin Registry (total number of PD cases identified was 132).

Results: Preliminary results show that the positive predictive value of a PD diagnosis in the National Patient Register was 73%. Misclassification between PD and other parkinsonism was common, leading to that when grouped together, the positive predictive value of all Parkinsonian disorders was 92%. The sensitivity of PD in the Cause of Death Register was 58%, whereas the specificity was approximately 95%.

Conclusions: Many cases of PD are missed in the registers, but those that are captured are mostly correctly identified. The misclassification (i.e. the high degree of false negatives) must be accounted for in epidemiological studies.