

Il *linkage* tra le storie professionali di fonte INPS e i dati dei ricoveri ospedalieri per lo studio delle cause lavorative di alcuni tumori e degli aborti spontanei

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KEY WORDS

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SUMMARY

«Use of pension records for occupational health surveillance: example of record-linkage with hospital discharge records to study the association between work and the incidence of leukaemias, lung and bladder cancer, and miscarriage». Background: Epidemiologic surveillance of occupational health based on routinely collected data allows groups of workers to be studied, whose type of work (e.g. small enterprises, self-employed workers, artisans) makes it difficult to use a traditional cohort study design. Objective: To evaluate the validity of a study design based on the record-linkage between hospital discharge records and INPS social security records (National Institute for Social Security), in order to investigate the association between past employment in an economic sector and occurrence of diseases with a low fraction attributable to occupation and a high frequency in the population, where it is too costly to perform retrospective interviews to gather data from each recruited subject. Methods: A case-control study design was used in which hospital discharge records from 1995 in the Piedmont Region represented the source of subjects enrolled. Four series of cases were identified: males aged 40-75 years, with first hospital admission for leukaemia, lung or bladder cancer; and women aged 18-39 years, admitted for miscarriage. The controls were a random sample of patients admitted in the same year and matched by sex and age. The exposure variable was the prevalent economic sector in the occupational history of the subjects enrolled, as inferred from INPS social security records. Results: No economic sector examined showed a significant excess of incidence of bladder cancer or leukaemia. There was a significant excess of lung cancer in subjects with longest employment in the building industry, in metal working, and in the "foundries, heat pressing, forging, and rolling mills" sector. A significant excess of miscarriages was present only in women working in commerce. Discussion: The results demonstrated overall a low consistency compared with those obtained via other surveillance systems of occupational morbidity and mortality, as well as by means of analytical studies. The results appear more plausible for the sectors characterized by a low number of job tasks, or by a more homogenous exposure to risk factors among workers in different jobs. Among the limitations of this study the lack of a complete occupational history, the absence of information on potential confounders like smoking and alcohol consumption, and the probable non-differential misclassification of the longest held job need to be stressed.