

Mortalità per causa dei lavoratori della raffineria di Roma

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SUMMARY

«Mortality study among employees at an oil refinery in Rome, Italy». We evaluated mortality among subjects employed in an oil refinery plant in Rome, Italy. We studied two subgroups of refinery employees: blue collar and white collar workers. A total of 682 men (505 blue collars, 148 white collars, 29 unknown) employed between 1965 and 1992, were followed up for mortality since employment in the plant to July 1999. Standardized Mortality Ratios (SMR), and their 90% Confidence Intervals (90% CI), comparing mortality rates of the cohort members with those of the general population of the Lazio region. For blue collar workers, we performed analyses by latency since first employment and by duration of employment for selected cancer sites. We observed 94 total deaths (100.8 expected) (SMR=0.93; 90% CI=0.78-1.11) among blue collar workers and 16 total deaths (31.7 expected) (SMR=0.50; 90% CI=0.32-0.77) among white collar workers, and a large deficit of deaths from non-neoplastic cardiovascular diseases (respectively SMR=0.60; 90% CI=0.41-0.86 and SMR=0.18; 90% CI=0.03-0.56). All cancer mortality was slightly increased only in blue collars (SMR=1.27 CI=0.97-1.65). There was an excess risk from cancer of the lung (20 obs SMR=1.80, 90% CI=1.19-2.62), bladder (5 obs SMR=3.19, 90% CI=1.26-6.72), and benign/unspecified cancer of the brain (4 obs SMR=4.11, 90% CI=1.12-10.6). The lower mortality from cardiovascular disease indicates the presence of a strong healthy worker effect. The findings of elevated mortality from cancer of the lung and bladder in blue collar workers are in agreement with those of other studies. Confounding factors from cigarette smoking might have played only a marginal role in influencing the results. Exposure to polynuclear aromatic hydrocarbons (PAHs) is a plausible explanation for the excesses found.