

Occupations and socioeconomic status as risk factors for skin melanoma

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Background. We studied variations in incidence of skin melanoma in the five Nordic countries by occupation and socioeconomic status. **Method.** Information on occupation of 15 million inhabitants aged 30-65 was collected in 1960, 1970, 1980 and/or 1990 censuses. Follow-up was obtained through linkages with national death and cancer registries until 2002-2005. Close to 385 million person years at risk were accumulated and almost 85,000 cases of skin melanoma occurred during the follow-up period. Cancer data was tabulated by 53 occupational categories and a category of economically inactive persons. Socioeconomic status was grouped into four levels based on occupational category, while workers in farming/forestry/fishing and economically inactive persons were kept in separate groups. The observed number of skin melanoma cases in each occupational group was compared with the expected number of cases based on the incidence rates of the national populations, and presented as standardized incidence ratios (SIRs), defined as the ratio of the observed to the expected number with 95% confidence intervals (95% CI).

Results. For both genders combined, the risk for skin melanoma was high for those with a high socioeconomic status and low for those with outdoor work. The highest risk was found in dentists, SIR 1.66 (95% CI 1.45-1.91), and all managers also had an increased risk, SIR 1.34 (95% CI 1.31-1.36). The lowest risk was found in fishermen, SIR 0.51 (95% CI 0.45-0.58), and all unskilled workers also had a decreased risk, SIR 0.84 (95% CI 0.82-0.86). **Conclusions.** We found little evidence of an association between occupations and risk of skin melanoma, which is consistent with previous published studies. The Nordic countries are known for equity and free and equal access to health care for all citizens. The present study shows that even under these circumstances the risk of skin melanoma is highly depending on persons' socioeconomic position in society, and thereby presumably their lifestyle.