

The healthy worker effect in cancer incidence studies

Deskripsi Lengkap: <https://lib.fkm.ui.ac.id/detail.jsp?id=102098&lokasi=lokal>

Abstrak

Use of the general population as a reference might cause serious underestimation of the risk of cancer in working populations because of the healthy worker effect. Using incidence rates, we studied how this underestimation varied according to subtypes of cancer by comparing a large cohort of randomly selected Norwegian workers hired between 1981 and 2003 ($n = 366,114$) with the general Norwegian population. The cohort was linked to the Cancer Registry of Norway, including all new cancer cases ($n = 11,271$) reported up to 2003. We found marked potential for the healthy worker effect for overall cancer incidence in male workers (standardized incidence ratio (SIR) = 0.91, 95% confidence interval: 0.89, 0.93) but not in female workers (SIR = 0.99, 95% confidence interval: 0.95, 1.03). A statistically significantly lower incidence was found among men for cancers of the head and neck (SIR = 0.78), lung (SIR = 0.81), prostate (SIR = 0.93), kidney (SIR = 0.83), and bladder (SIR = 0.77) and for leukemia (SIR = 0.80), whereas an increased incidence was found for malignant melanoma among both men (SIR = 1.09) and women (SIR = 1.29) and for ovarian cancer in women (SIR = 1.32). Depending on the type of cancer being studied, marked potential exists for both underestimation and overestimation of cancer risk when the general population is used as the reference for studies of worker populations.