Appendix S1.

MATERIALS AND METHODS

Nationwide survey of level of living: working conditions

Data were collected during the period June 2009 to January 2010 by personal telephone interviews (0.5% of completed interviews were face-to-face). Prior to telephone contact, potential respondents were informed by mail about the topic of the study and privacy protection. The eligible respondents were Norwegian residents aged 18–69 years. In 2009, this population consisted of 3,079,157 persons (source population). A gross sample of 20,136 individuals, independent of employment status, was randomly drawn. Of these, 7,881 did not respond at baseline, and the most important reason (19%) was that the interviewer was unable to get in touch with the respondents despite several attempts, 16% did not want to participate, and 3% were prevented from participation. A total of 12, 255 (61%) persons were then interviewed (Fig. 1). The baseline sample was compared with the gross sample according to the benchmarks of age, sex and region; and no major differences were detected (S1).

Socio-demographic variables

Information regarding sex, age, and educational level was based on administrative registry data. Occupation was based on an open questionnaire and coded by Statistics Norway into a professional title, in accordance with the International Standard Classification of Occupations (ISCO-88).

Predictors

The questions regarding occupational skin exposures (Table I) have been applied in regular surveys of living conditions since 1989. The response categories were "Yes" and "No". "Yes" respondents were asked to estimate the duration of exposure at work (response categories: "almost all the time", "three-quarters of the working day", "half of the working day", "a quarter of the working day" and "very little of the working day"). Scores were re-coded to not exposed ("none or very little of the working day"), and exposed ("a quarter of the working day", "half of the working day" and "three- quarters of the working day or more").

Rationale of the cut-off limit physician-certified long-term sick leave

The rationale of the cut-off limit used is that a sick leave period with a duration shorter than 16 days may include sick leave that is due to minor health problems such as common cold and the ability to stay at home with sick children. In Norway, employees are entitled to use a personal declaration for sick leave of up to three days or a total of eight days spread over four different occasions during a 12-month period. In addition, if the employee´s child is sick, the employee has the right to stay at home for 10–15 days, depending on the number of children. If the employee is sick beyond the personal declaration days, or if the severity of the illness requires it, then physician-certified sick leave is required. Therefore, physician-certified sick leave for 16 days or longer is likely to capture sickness that is more serious.

Models for statistical analysis

In model #1, we adjusted for age. In model #2, further adjustments were made for education and psychosocial work exposures shown to predict physician-certified sick leave in the general working population of Norway (S2). In model #3, effects were adjusted for age, education and mechanical work exposures shown to predict sick leave in the general working population of Norway (S3). Since gender differences in LTSL have been reported (S4) all analyses were carried out separately for men and women.

Population attributable risk (PAR)

The PAR estimate indicates the number (or proportion) of cases that would not occur in a population if the factor were eliminated. The attributable risk in a population depends on the prevalence of the risk factor and the strenght of its association with the disease (S5).

Summary population-attributable risk

The summary attributable risk was calculated according to the formulae: 1 - (1-PARvariable1) X (1-PARvariable2) X (1-PAR variable3), etc (S6).

Ethical considerations

Statistics Norway carried out the survey according to statutory rules. Statistics Norway has appointed its own privacy ombudsman, approved by the Norwegian Data Inspectorate. All persons gave their informed consent prior to their inclusion in the study.

SUPPLEMENTARY REFERENCES

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