P174 NECK PAIN AND PERCEIVED STRESS: ANALYSING REPEATED BINARY OUTCOMES FROM A COHORT STUDY

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Objectives Musculoskeletal neck pain is a common disorder, even in groups with light physical work as computer work. The high prevalence of neck pain implies that the common effect measure OR over-estimates the RR. The aim was to investigate the impact of perceived stress and computer use pattern on neck pain, and to compare the results presented as

relative effect measures (OR, RR) and as absolute effect measures (risk difference, RD).

Methods The sample consisted of 1200 Swedish university students, 19–25 years old. The students responded to 5 annual questionnaires, covering, for example, health, computer use, psychosocial dimensions and life-style. These longitudinal data were analysed with random intercept logistic models. Both relative (OR, RR) and absolute (risk difference, RD) effect measures were estimated.

Results For men the absolute effect of stress was small (RD=0.02 to 0.03), but the relative effect indicated that stress doubled the risk of neck pain. For women both the absolute effect (RD=0.14–0.20) and the relative effect (RR=2.2–2.5) was significant. Among women, a synergy between stress and computer use pattern was identified.

Conclusions Both perceived stress and computer use pattern had an impact on neck pain, but the causality between the risk factors and neck pain may differ between women and men. Absolute effect measures may be used for quantifying and comparing (eg, women and men) risk factors. Relative effect measures may be used to evaluate whether the outcome can be attributed to a certain risk factor.