**Table 2 Associations of neck/shoulder pain with personal and occupational factors**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Personal/occupational factor** |  | **Localised neck/shoulder pain** | | |  | **Generalised pain involving neck/shoulder** | | |
|  |  | **Number of cases** | **PRRa** | **(95%CI)** |  | **Number of cases** | **PRRa** | **(95%CI)** |
|  |  |  |  |  |  |  |  |  |
| **Sex** |  |  |  |  |  |  |  |  |
| Male |  | 211 (7.9%) | 1 |  |  | 1009 (29.1%) | 1 |  |
| Female |  | 469 (14.0%) | 1.4 | (1.1,1.7) |  | 3273 (53.1%) | 1.3 | (1.2,1.4) |
|  |  |  |  |  |  |  |  |  |
| **Age (years)** |  |  |  |  |  |  |  |  |
| 20-29 |  | 180 (10.6%) | 1 |  |  | 856 (36.0%) | 1 |  |
| 30-39 |  | 230 (11.8%) | 1.1 | (0.9,1.4) |  | 1329 (43.6%) | 1.2 | (1.1,1.3) |
| 40-49 |  | 193 (12.5%) | 1.1 | (0.9,1.4) |  | 1327 (49.6%) | 1.3 | (1.1,1.4) |
| 50-59 |  | 77 (9.3%) | 0.8 | (0.7,1.1) |  | 770 (50.7%) | 1.3 | (1.2,1.5) |
|  |  |  |  |  |  |  |  |  |
| **Activity in an average working day** |  |  |  |  |  |  |  |  |
| Lifting weights ≥25 kg |  | 199 (9.4%) | 0.9 | (0.7,1.1) |  | 1602 (45.5%) | 1.1 | (1.0,1.1) |
| Working with hands above shoulder height for >1 hour |  | 177 (10.3%) | 1.0 | (0.9,1.3) |  | 1508 (49.4%) | 1.1 | (1.1,1.2) |
| Use of keyboard for >4 hours |  | 316 (15.6%) | 1.3 | (1.1,1.6) |  | 1725 (50.2%) | 1.1 | (1.0,1.2) |
|  |  |  |  |  |  |  |  |  |
| **Psychosocial aspects of work** |  |  |  |  |  |  |  |  |
| Work for >50 hours per week |  | 140 (8.2%) | 1.0 | (0.7,1.2) |  | 592 (27.5%) | 0.9 | (0.8,1.0) |
| Time pressure at work |  | 485 (10.9%) | 1.1 | (0.9,1.3) |  | 3350 (45.9%) | 1.2 | (1.1,1.2) |
| Incentives at work |  | 188 (10.5%) | 1.0 | (0.9,1.2) |  | 1140 (41.5%) | 0.9 | (0.9,1.0) |
| Lack of support at work |  | 174 (15.4%) | 1.1 | (0.9,1.4) |  | 1344 (58.5%) | 1.1 | (1.0,1.1) |
| Job dissatisfaction |  | 146 (11.7%) | 1.1 | (0.9,1.4) |  | 868 (43.9%) | 1.0 | (1.0,1.1) |
| Lack of job control |  | 130 (10.3%) | 1.0 | (0.8,1.2) |  | 963 (46.0%) | 1.0 | (0.9,1.1) |
| Job insecurity |  | 195 (10.0%) | 1.0 | (0.9,1.1) |  | 1331 (43.2%) | 1.0 | (1.0,1.1) |
|  |  |  |  |  |  |  |  |  |
| **Number of distressing somatic symptoms in past week** |  |  |  |  |  |  |  |  |
| 0 |  | 425 (9.9%) | 1 |  |  | 1859 (32.4%) | 1 |  |
| 1 |  | 163 (15.1%) | 1.3 | (1.1,1.6) |  | 1059 (53.6%) | 1.4 | (1.3,1.5) |
| 2+ |  | 87 (14.8%) | 1.3 | (1.1,1.5) |  | 1320 (72.4%) | 1.6 | (1.5,1.8) |
| Missing |  | 5 (9.6%) | 1.0 | (0.3,3.0) |  | 44 (48.4%) | 1.3 | (1.1,1.6) |
|  |  |  |  |  |  |  |  |  |
| **Mental health** |  |  |  |  |  |  |  |  |
| Good |  | 265 (10.4%) | 1 |  |  | 1311 (36.4%) | 1 |  |
| Intermediate |  | 216 (12.3%) | 1.2 | (0.9,1.4) |  | 1333 (46.3%) | 1.2 | (1.1,1.3) |
| Poor |  | 195 (11.7%) | 1.1 | (0.9,1.4) |  | 1621 (52.5%) | 1.3 | (1.2,1.4) |
| Missing |  | 4 (9.3%) | 1.1 | (0.5,2.5) |  | 17 (30.4%) | 0.8 | (0.5,1.1) |
|  |  |  |  |  |  |  |  |  |
| **Adverse beliefs about arm pain** |  |  |  |  |  |  |  |  |
| Work-relatedness |  | 159 (11.4%) | 1.1 | (0.9,1.3) |  | 1613 (56.6%) | 1.2 | (1.2,1.3) |
| Physical activity |  | 62 (8.7%) | 0.8 | (0.6,1.0) |  | 425 (39.5%) | 0.8 | (0.8,0.9) |
| Prognosis |  | 69 (15.2%) | 1.3 | (1.0,1.5) |  | 604 (61.0%) | 1.1 | (1.1,1.2) |

aPrevalence rate ratios derived from a single Poisson regression model, with random intercept modelling to allow for clustering by occupational group. The reference group was participants with no pain in the neck or shoulders in the past 12 months (n = 5344). The denominators for percentages of cases are the total numbers of cases and referents with the relevant personal/occupational factor.