Table S.1. Sociodemographic and health characteristics variables (BHW and AHW survey)

| **Variable** | **Description** |
| --- | --- |
| **Ethnicity** | 1. White (1 yes - 0 no); 2. Asian (1 yes - 0 no); 3. Black (1 yes - 0 no); 4. Other (1 yes - 0 no) |
| **Education** | 1. Completed primary education only ( 1 yes - 0 no); 2. completed secondary education (1 yes - 0 no); 3. completed tertiary education (1 yes - 0 no). |
| **Income** | Below country-specific median income (1 yes - 0 no) |
| **Irregular hours** | Working irregular working hours such as night shifts (1 yes - 0 no) |
| **Marital status** | 1. Married or cohabitating (1 yes - 0 no); 2. other (1 yes - 0 no) |
| **Children** | Children under 18 living in the same household (1 yes - 0 no) |
| **BMI** | 1. BMI < 18.5; (1 yes - 0 no); 2. BMI >25 to 30 (1 yes - 0 no); 3. BMI >30 (1 yes - 0 no); 4. BMI 18.5 to 25 (1 yes - 0 no) |
| **Current smoker** | Currently smoking cigarettes (1 yes - 0 no) |
| **Excessive alcohol consumption** | Consumption > 14 units (8mg) per week (1 yes - 0 no) |
| **Physical inactivity** | Exercising less than 150 mins per week (1 yes - 0 no) |
| **Excessive salt intake** | Salt addition to every meal regularly more than a pinch of salt (1 yes - 0 no) |
| **Asthma** | Clinically diagnosed with Asthma within the last 12 months; (1 yes - 0 no) |
| **Cardiovascular disease** | Clinically diagnosed with Cardiovascular disease within the last 12 months; (1 yes - 0 no) |
| **Kidney disease** | Clinically diagnosed with Kidney disease within the last 12 months; (1 yes - 0 no) |
| **Cancer** | Clinically diagnosed with Cancer within the last 12 months; (1 yes - 0 no) |
| **Diabetes** | Clinically diagnosed with Diabetes within the last 12 months; (1 yes - 0 no) |
| **Hypertension** | Clinically diagnosed with Hypertension within the last 12 months; (1 yes - 0 no) |

Abbreviations. BMI, body mass index.

Table S.2. Associations between clinically significant nocturia (≥2 nocturnal voids) and total work impairment due to absenteeism and presenteeism (WPAI) adjusted for sociodemographic and health characteristics and poor sleep.

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Pooled sample** | | | | **BHW sample** | | | | **AHW sample** | | | |
|  | **1. Nocturnal voids: 0-1** | | **2. Difference to ≥ 2 voids** | | **1. Nocturnal voids: 0-1** | | **2. Difference to ≥ 2 voids** | | **1. Nocturnal voids: 0-1** | | **2. Difference to ≥ 2 voids** | |
|  | **Adj. Mean** | ***95% CI*** | **Adj. Mean** | **p value** | **Adj. Mean** | ***95% CI*** | **Adj. Mean** | **p value** | **Adj. Mean** | ***95% CI*** | **Adj. Mean** | **p value** |
| **Age group** |  |  |  |  |  |  |  |  |  |  |  |  |
| **18-30** | 0.186 | *0.185 - 0.188* | 0.028 | <0.001 | 0.128 | *0.127 - 0.130* | 0.030 | 0.002 | 0.282 | *0.280 - 0.283* | 0.025 | 0.004 |
|  | **n = 28,897** | | | | **n = 16,483** | | | | **n = 12,414** | | | |
| **31-40** | 0.110 | *0.109 - 0.111* | 0.015 | <0.001 | 0.082 | *0.081 - 0.083* | 0.015 | <0.001 | 0.174 | *0.172 - 0.175* | 0.019 | 0.025 |
|  | **n = 28,265** | | | | **n = 15,911** | | | | **n = 12,354** | | | |
| **41-50** | 0.162 | *0.161 - 0.163* | 0.012 | 0.014 | 0.108 | *0.107 - 0.109* | 0.008 | 0.206 | 0.243 | 0.241 - 0.244 | 0.018 | 0.012 |
|  | **n = 20,954** | | | | **n = 14,057** | | | | **n = 6,897** | | | |
| **50-70** | 0.081 | *0.079 - 0.082* | 0.009 | 0.012 | 0.070 | *0.069 - 0.072* | 0.008 | 0.042 | 0.098 | *0.095 - 0.100* | 0.013 | 0.062 |
|  | **n = 14,063** | | | | **n = 11,180** | | | | **n = 2,883** | | | |

Abbreviations. BHW, Britain’s Healthiest Workplace survey; AHW, Asian’s Healthiest Workplace survey, WPAI, Work Productivity and Activity impairment.

Note. Mean values adjusted for age, gender, ethnicity, education, income, working irregular hours, marital status, body mass index, smoking status, physical inactivity (less than 150 mins/week), excessive alcohol consumption (more than country-specific recommended amount), excessive salt intake (more than country-specific recommended amount), comorbid asthma, cancer, diabetes, hypertension, kidney disease, psychological distress and anxiety, sleep disturbance score and dummy variable for short sleep. Adjusted means need to be multiplied by 100 to calculate the percentage point change in total work impairment due to absenteeism and presenteeism.

Figure S.1. Inclusion and exclusion criteria for sample populations

