**Figure 1: Working capacity regained 9-12 months after the SARS-Cov2-infection compared to pre-COVID (WAI1) in the study population (Panel A) and considering minimum possible prevalence (Panel B)**



Panel A shows the distribution in the study population.   
Panel B shows the minimum possible prevalence of working capacity including non-responders assuming that all non-responders have regained a working capacity of 100%.   
Colours of the values (percentages) above the bars indicate the coloured bars they belong to in each panel (e.g., 4.2% of the participants regained 0 to 50% of their working capacity compared to pre-COVID in Panel A)

**Figure 2: Patterns of working capacity regained in the study population 9-12 months after the SARS-Cov2-infection compared to pre-COVID (WAI1) according to age and sexa**



a: Colours of the values (percentages) beside the bars indicate the coloured bars they belong to in each panel

**Figure 3: Prevalence difference and mutually adjusted associations of post-COVID symptom clusters with the work ability index (mWAI<P15) in the study population 9-12 months after the SARS-Cov2-infection according to agea**

**Age <30 years**



**Age 30-<40 years**



**Age 40-<50 years**



**Age 50-<60 years**



**Age >60 years**



CI: Confidence interval, mWAI: Work ability index modified, OR: Odds ratio, P15: 15th percentile; for the model we only included the most prevalent seven symptom clusters (not present before the acute SARS-Cov-2 infection), irrespective of WAI<P15, Prev: Prevalence, Prevdiff: Prevalence difference

a: adjusted for sex, age, education, marital status, nationality, smoking, obesity, work demands, medical treatment during acute infection, and the post-COVID symptom clusters indicated in the table; a prevalence difference of 0 indicates the comparison group

**Table 1: Prevalence difference and mutually adjusted associations of physician-diagnosed comorbidities with mWAI<P15 in the study population 9-12 months after the SARS-Cov2-infection (in categories as evaluated with WAI-questionnaire)a**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Self-reported physician-diagnosed comorbidities |  | **mWAI<P15**  **n/N** | **Prev [%]** | **Prev-diff [%]** | **OR (95% CI)a** |
| Musculoskeletal diseases | No | 486/5916 | 8.2 | 0 | 1 |
|  | Prior to infection | 547/2762 | 19.8 | 11.6 | **1.4 (1.1; 1.6)** |
|  | During/after infection | 106/362 | 29.3 | 21.1 | **1.8 (1.3; 2.5)** |
| Cardiovascular diseases | No | 695/7049 | 9.9 | 0 | 1 |
|  | Prior to infection | 334/1675 | 19.9 | 10.1 | 1.2 (1.0; 1.5) |
|  | During/after infection | 95/311 | 30.5 | 20.7 | 1.4 (0.9; 2.0) |
| Respiratory diseases | No | 752/7512 | 10.0 | 0 | 1 |
|  | Prior to infection | 223/1159 | 19.2 | 9.2 | 1.1 (0.9; 1.4) |
|  | During/after infection | 127/336 | 37.8 | 27.8 | **1.8 (1.3; 2.4)** |
| Mental disorders | No | 543/7443 | 7.3 | 0 | 1 |
|  | Prior to infection | 318/1125 | 28.3 | 21.0 | **3.6 (3.0; 4.3)** |
|  | During/after infection | 214/395 | 54.2 | 46.9 | **8.0 (6.1;10.4)** |
| Neurological and sensory disorders | No | 716/7245 | 9.9 | 0 | 1 |
| Prior to infection | 300/1518 | 19.8 | 9.9 | **1.4 (1.2; 1.7)** |
|  | During/after infection | 105/272 | 38.6 | 28.7 | **2.2 (1.6; 3.2)** |
| Hormonal and metabolic disorders | No | 805/7389 | 10.9 | 0 | 1 |
| Prior to infection | 328/1644 | 20.0 | 9.1 | 1.1 (0.9; 1.4) |
|  | During/after infection | 34/103 | 33.0 | 22.1 | **2.3 (1.3; 3.9)** |

mWAI: Work ability index modified, P15: 15th percentile, OR: Odds ratio, CI: Confidence interval, Prevdiff: Prevalence difference; bold letters indicate statistical significance at p<0.05.

a: adjusted for sex, age, education, marital status, nationality, smoking, obesity, work demands, treatment during acute infection, and all other comorbidities included in the table; a prevalence difference of 0 indicates the comparison group

**Table 2: Prevalence difference and mutually adjusted associations of post-COVID symptom clusters with mWAI<P15 in the study population 9-12 months after the SARS-Cov2-infection according to work demandsa**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Work demands |  | Mainly mental | | | | Mental and physical or mainly physical work demands | | | |
| Post-COVID symptom clusters |  | **mWAI<P15**  **n/N** | **Prev [%]** | **Prev-diff [%]** | **OR (95% CI)**a | **mWAI<P15**  **n/N** | **Prev [%]** | **Prev-diff [%]** | **OR (95% CI)**a |
| Fatigue | No | 69/2827 | 2.4 | 0 | 1 | 114/2678 | 4.3 | 0 | 1 |
|  | Yes | 366/1570 | 23.3 | 20.9 | **2.5 (1.8; 3.6)** | 621/1931 | 32.2 | 27.9 | **2.9 (2.2; 3.9)** |
| Neurocognitive impairment | No | 60/3000 | 2.0 | 0 | 1 | 190/3081 | 6.2 | 0 | 1 |
| Yes | 374/1426 | 26.2 | 24.2 | **5.4 (3.9; 7.6)** | 539/1551 | 34.8 | 28.6 | **2.5 (2.0; 3.2)** |
| Chest symptoms | No | 139/3126 | 4.4 | 0 | 1 | 223/3141 | 7.1 | 0 | 1 |
|  | Yes | 304/1305 | 23.3 | 18.9 | **1.5 (1.2; 2.0)** | 521/1517 | 34.3 | 27.2 | **2.1 (1.7; 2.7)** |
| Anxiety/depression | No | 176/3531 | 5.0 | 0 | 1 | 324/3609 | 9.0 | 0 | 1 |
|  | Yes | 263/922 | 28.5 | 23.5 | **2.0 (1.5; 2.6)** | 424/1088 | 39.0 | 30.0 | **1.9 (1.5; 2.3)** |
| Headache/dizziness | No | 211/3598 | 5.9 | 0 | 1 | 346/3582 | 9.6 | 0 | 1 |
|  | Yes | 223/834 | 26.8 | 20.9 | **1.4 (1.1; 1.8)** | 383/1051 | 36.4 | 26.8 | **1.7 (1.4; 2.1)** |
| Musculoskeletal pain | No | 245/3753 | 6.5 | 0 | 1 | 348/3658 | 9.5 | 0 | 1 |
| Yes | 193/660 | 29.2 | 22.7 | **1.6 (1.2; 2.1)** | 384/960 | 40.0 | 30.5 | **1.6 (1.3; 2.0)** |
| Smell/taste | No | 256/3337 | 7.7 | 0 | 1 | 448/3485 | 12.9 | 0 | 1 |
|  | Yes | 176/1049 | 16.8 | 9.1 | **1.5 (1.2; 1.9)** | 276/1098 | 25.1 | 12.2 | 1.3 (1.0; 1.6) |

mWAI: Work ability index modified, P15: 15th percentile, OR: Odds ratio, CI: Confidence interval, Prevdiff: Prevalence difference, for the model we only included the most prevalent seven clusters of symptoms (not present before the acute SARS-Cov-2 infection), irrespective of WAI<P15; bold letters indicate statistical significance at p<0.05.

a: adjusted for sex, age, education, marital status, nationality, smoking, obesity, treatment during acute infection, and the post-COVID symptom clusters indicated in the table; a prevalence difference of 0 indicates the comparison group

**Table 3: Prevalence difference and mutually adjusted associations of physician-diagnosed comorbidities with mWAI<P15 in the study population 9-12 months after the SARS-Cov2-infection according to work demandsa**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Work demands | Mainly mental | | | | | Mental and physical or mainly physical work demands | | | |
| Self-reported physician-diagnosed comorbidities |  | **mWAI<P15**  **n/N** | **Prev [%]** | **Prev-diff [%]** | **OR (95% CI)** | **mWAI<P15**  **n/N** | **Prev [%]** | **Prev-diff [%]** | **OR (95% CI)** |
| Musculoskeletal diseases | No | 206/3043 | 6.8 | 0 | 1 | 280/2873 | 9.7 | 0 | 1 |
|  | Prior to infection | 200/1223 | 16.4 | 9.6 | 1.4 (1.0; 1.8) | 347/1539 | 22.5 | 12.8 | **1.4 (1.1; 1.7)** |
|  | During/after infection | 24/146 | 16.4 | 9.7 | 1.1 (0.6; 2.0) | 82/216 | 38.0 | 28.2 | **2.3 (1.5; 3.5)** |
| Cardiovascular diseases | No | 289/3529 | 8.2 | 0 | 1 | 406/3520 | 11.5 | 0 | 1 |
|  | Prior to infection | 105/733 | 14.3 | 6.1 | 1.2 (0.9; 1.7) | 229/942 | 24.3 | 12.8 | 1.2 (1.0; 1.6) |
|  | During/after infection | 30/139 | 21.6 | 13.4 | 1.3 (0.7; 2.2) | 65/172 | 37.8 | 26.3 | 1.6 (1.0; 2.6) |
| Respiratory diseases | No | 299/3740 | 8.0 | 0 | 1 | 453/3772 | 12.0 | 0 | 1 |
|  | Prior to infection | 84/534 | 15.7 | 7.7 | 1.1 (0.8; 1.5) | 139/625 | 22.2 | 10.2 | 1.2 (0.9; 1.5) |
|  | During/after infection | 39/ 127 | 30.7 | 22.7 | **1.9 (1.1; 3.2)** | 88/209 | 42.1 | 30.1 | **1.7 (1.1; 2.5)** |
| Mental disorders | No | 204/3701 | 5.5 | 0 | 1 | 339/3742 | 9.1 | 0 | 1 |
|  | Prior to infection | 136/530 | 25.7 | 20.2 | **4.3 (3.2; 5.7)** | 182/595 | 30.6 | 21.5 | **3.0 (2.3; 3.9)** |
|  | During/after infection | 72/151 | 47.7 | 42.2 | **6.6 (4.3;10.3)** | 142/244 | 58.2 | 49.1 | **8.9 (6.3; 12.6)** |
| Neurological and sensory disorders | No | 253/3515 | 7.2 | 0 | 1 | 463/3730 | 12.4 | 0 | 1 |
| Prior to infection | 119/755 | 15.8 | 8.6 | 1.4 (1.0; 1.9) | 181/763 | 23.7 | 11.3 | **1.5 (1.1; 1.9)** |
|  | During/after infection | 46121 | 38.0 | 30.8 | **3.4 (2.0; 5.9)** | 59/151 | 39.1 | 26.7 | 1.6 (1.0; 2.6) |
| Hormonal and metabolic disorders | No | 307/3648 | 8.4 | 0 | 1 | 498/3741 | 13.3 | 0 | 1 |
| Prior to infection | 120/741 | 16.2 | 7.8 | 1.1 (0.8; 1.5) | 208/903 | 23.0 | 9.7 | 1.2 (0.9; 1.5) |
|  | During/after infection | 11/50 | 22.0 | 13.6 | 2.4 (1.0; 5.6) | 23/53 | 43.4 | 30.1 | **2.2 (1.1; 4.6)** |

mWAI: Work ability index modified, P15: 15th percentile, OR: Odds ratio, CI: Confidence interval, Prev: Prevalence, Prevdiff: Prevalence difference, bold letters indicate statistical significance at p<0.05. a: adjusted for sex, age, education, marital status, nationality, smoking, obesity, treatment during acute infection, and all other comorbidities included in the table, a prevalence difference of 0 indicates the comparison group