**Table 2. Multiply-adjusted odds ratios (95% CI) for incident COVID-19 hospitalisation according to baseline psychological characteristics**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Psychological characteristics** | **Number of cases/**  **number at risk1** | **Adjustments** | | | | |
|  |  | **None** | **Age, sex & ethnicity** | **Age, sex, ethnicity & comorbidity2** | **Age, sex, ethnicity & lifestyle factors3** | **Age, sex, ethnicity & socioeconomic factors4** | |
| Psychological distress |  | (n=384909) | (n=383655) | (n=377290) | (n=376562) | (n=329180) | |
| 1 (low) | 185/153504 | 1.0 (ref) | 1.0 (ref) | 1.0 (ref) | 1.0 (ref.) | 1.0 (ref.) | |
| 2 | 215/140200 | 1.27 (1.05, 1.55) | 1.39 (1.14, 1.69) | 1.29 (1.05, 1.58) | 1.23 (1.01, 1.51) | 1.32 (1.06, 1.64) | |
| 3 | 172/91205 | 1.57 (1.27, 1.93) | 1.69 (1.37, 2.09) | 1.52 (1.22, 1.89) | 1.34 (1.08, 1.68) | 1.47 (1.16, 1.87) | |
| P for trend |  | <0.0001 | <0.0001 | 0.004 | 0.007 | 0.004 | |
| Per SD increase |  | 1.20 (1.12, 1.28) | 1.21 (1.13, 1.30) | 1.17 (1.09, 1.26) | 1.12 (1.04, 1.21) | 1.17 (1.06, 1.30) | |
|  |  |  |  |  |  |  | |
| Psychiatric consultation |  | n=427819 | n=426823 | n=418218 | n=417481 | n=359947 | |
| No | 559/379080 | 1.0 (ref) | 1.0 (ref) | 1.0 (ref) | 1.0 (ref) | 1.0 (ref) | |
| Yes | 110/487739 | 1.56 (1.27, 1.91) | 1.46 (1.17, 1.79) | 1.55 (1.26, 1.92) | 1.44 (1.16, 1.78) | 1.50 (1.19, 1.89) | |
|  |  |  |  |  |  |  | |
| Neuroticism |  | n=344488 | n=343471 | n=337989 | n=337258 | n=296679 | |
| 1 (low) | 142/92613 | 1.0 (ref) | 1.0 (ref) | 1.0 (ref) | 1.0 (ref) | 1.0 (ref) | |
| 2 | 160/110522 | 0.94 (0.75, 1.18) | 1.02 (0.82, 1.29) | 0.97 (0.77, 1.22) | 1.00 (0.80, 1.27) | 1.04 (0.81, 1.33) | |
| 3 | 217/141353 | 1.00 (0.81, 1.24) | 1.15 (0.92, 1.42) | 1.05 (0.84, 1.30) | 1.03 (0.83, 1.29) | 1.06 (0.84, 1.35) | |
| P for trend |  | 0.932 | 0.191 | 0.637 | 0.754 | 0.608 | |
| Per SD increase |  | 1.01 (0.92, 1.10) | 1.06 | 1.02 (0.93, 1.11) | 1.01 (0.92, 1.10) | 1.02 (0.93, 1.12) | |
|  |  |  |  |  |  |  | |
| Verbal numerical reasoning |  | n=175267 | n=174581 | n=172530 | n=415777 | N=150604 | |
| 1 (low) | 114/43988 | 2.52 (1.88, 3.37) | 2.19 (1.61, 1.97) | 2.05 (1.49, 1.81) | 1.81 (1.32, 2.49) | 2.05 (1.42, 3.00) | |
| 2 | 83/58446 | 1.38 (1.01, 1.39) | 1.33 (0.97, 1.83) | 1.34 (1.97, 1.85) | 1.27 (0.92, 1.74) | 1.42 (1.01, 2.01 | |
| 3 | 75/72833 | 1.0 (ref) | 1.0 (ref) | 1.0 (ref) | 1.0 (ref) | 1.0 (ref) | |
| P for trend |  | <0.0001 | <0.0001 | <0.0001 | <0.0001 | <0.001 | |
| Per SD decrease |  | 1.47 (1.30, 1.56) | 1.37 (1.20, 1.55) | 1.33 (1.16, 1.51) | 1.26 (1.10, 1.43) | 1.32 (1.12, 1.54) | |
|  |  |  |  |  |  |  | |
| Reaction time |  | n=426127 | n=424432 | n=417366 | n=415777 | n=358720 | |
| 1 (low) | 185/140934 | 1.0 (ref) | 1.0 (ref) | 1.0 (ref) | 1.0 (ref) | 1.0 (ref) | |
| 2 | 199/141575 | 1.07 (0.88, 1.31) | 1.02 (0.83, 1.25) | 0.98 (0.80, 1.21) | 0.95 (0.77, 1.17) | 0.90 (0.72, 1.12) | |
| 3 | 269/143368 | 1.43 (1.18, 1.72) | 1.27 (1.04, 1.54) | 1.23 (1.00, 1.50) | 1.15 (0.94, 1.41) | 1.04 (0.84, 1.30) | |
| P for trend |  | <0.0001 | 0.015 | 0.037 | 0.148 | 0.646 | |
| Per SD increase |  | 1.17 (1.09, 1.24) | 1.10 (1.03, 1.18) | 1.09 (1.02, 1.17) | 1.07 (1.00, 1.15) | 1.05 (0.96, 1.130 | |
|  |  |  |  |  |  |  | |
| Social isolation score |  | n=431051 | n=428494 | n=420091 | n=419435 | n=361193 | |
| 0 | 342/228149 | 1.0 (ref) | 1.0 (ref) | 1.0 (ref) | 1.0 (ref) | 1.0 (ref) | |
| 1 | 263/164459 | 1.07 (0.91, 1.25) | 1.07 (0.91, 1.26) | 1.02 (0.87, 1.21) | 0.90 (0.76, 1.06) | 0.93 (0.77, 1.11) | |
| 2 | 55/35688 | 1.03 (0.77 1.37) | 0.98 (0.74, 1.31) | 0.94 (0.70, 1.25) | 0.73 (0.54, 0.99) | 0.78 (0.56, 1.07) | |
| 3 | 9/2755 | 2.18 (1.12, 4.24) | 1.96 (1.01, 3.81) | 1.88 (0.98, 3.66) | 1.41 (0.72, 2.76) | 1.25 (0.58, 2.67) | |
| P for trend |  | 0.222 | 0.328 | 0.675 | 0.113 | 0.232 | |

1 Numbers based on unadjusted model

2 Comorbidity includes diagnoses of vascular or heart disease, cancer, diabetes, chronic bronchitis or emphysema, asthma, and hypertension defined according to measured blood pressure and/or use of anti-hypertensive drugs

3 Lifestyle factors included body mass index, smoking status, alcohol intake frequency & number of types of physical activity taken in last four weeks

4 Socioeconomic factors included highest educational attainment, Townsend deprivation index, & household income before tax