Table S1. Sex stratified analysis of sociodemographics. Odds ratios (OR) * for any tinnitus, severe tinnitus (THI ≥58), and self-reported severe tinnitus, and corresponding 95% confidence intervals (CI), by sex according to age, level of education, and hearing ability. Sweden, 2016-2018.

| Age group (years) | Any tinnitus | Severe tinnitus (self-reported) | Severe tinnitus (THI ≥58) |
|-------------------|--------------|--------------------------------|---------------------------|
|                   | Men          | Women                          | Men                        | Women                      | Men                          | Women                      |
| <35               | 1 [Reference]| 1 [Reference]                  | 1 [Reference]              | 1 [Reference]              | 1 [Reference]               | 1 [Reference]               |
| 35-44             | 0.84 (0.60-1.19) | 0.77 (0.58-1.03)              | 0.41 (0.20-0.84)          | 0.62 (0.29-1.33)           | 0.22 (0.09-0.56)           | 0.38 (0.15-0.98)           |
| 45-54             | 0.73 (0.52-1.03) | 0.93 (0.70-1.22)              | 0.32 (0.16-0.66)          | 0.91 (0.46-1.81)          | 0.27 (0.11-0.62)          | 0.64 (0.29-1.42)           |
| 55-64             | 1.00 (0.65-1.55) | 1.09 (0.79-1.51)              | 0.51 (0.22-1.19)          | 1.16 (0.56-2.42)          | 0.24 (0.08-0.71)          | 0.77 (0.33-1.81)           |
| 65-74             | 0.89 (0.58-1.39) | 1.30 (0.93-1.82)              | 0.37 (0.15-0.91)          | 1.17 (0.52-2.62)          | 0.32 (0.11-0.90)          | 0.76 (0.29-1.98)           |
| ≥75               | 0.78 (0.40-1.55) | 1.23 (0.65-2.36)              | 0.31 (0.08-1.14)          | 1.89 (0.58-6.17)          | 0.27 (0.08-0.90)          | 0.98 (0.22-4.37)           |
| p for trend       | 0.652        | 0.023                          | 0.050                     | 0.128                     | 0.009                     | 0.760                      |
| Level of education|              |                                 |                           |                           |                           |                           |
| Low               | 1 [Reference] | 1 [Reference]                  | 1 [Reference]             | 1 [Reference]             | 1 [Reference]             | 1 [Reference]             |
| High              | 0.51 (0.39-0.68) | 0.83 (0.66-1.05)              | 0.22 (0.13-0.37)          | 0.49 (0.30-0.81)          | 0.13 (0.07-0.25)          | 0.42 (0.23-0.75)           |
| Hearing ability   |              |                                 |                           |                           |                           |                           |
| No difficulty     | 1 [Reference] | 1 [Reference]                  | 1 [Reference]             | 1 [Reference]             | 1 [Reference]             | 1 [Reference]             |
| Moderate difficulty| 3.65 (2.85-4.66) | 3.45 (2.81-4.23)              | 4.65 (2.46-8.78)         | 8.34 (3.75-18.5)         | 5.67 (2.38-13.5)         | 19.4 (4.62-81.1)           |
| Severe difficulty | 9.89 (6.02-16.3) | 16.0 (10.6-24.0)              | 40.7 (17.6-94.0)         | 125.8 (52.7-300.1)       | 70.0 (24.1-203.2)        | 352.9 (80.6-337)           |

THI: Tinnitus Handicap Inventory.
* ORs were estimated using unconditional multiple logistic regression models after adjustment for sex (men or women), age (<35, 35-44, 45-54, 55-64, 65-74, or ≥75 years), level of education (low or high), and hearing ability (yes, cannot hear at all; yes, severe difficulty; yes, moderate difficulty; yes, a slight difficulty; no difficulty). Estimates in bold are statistically significant at 0.05 level.
Table S2. Sociodemographic and psychological characteristics for participants with tinnitus with or without hyperacusis. Income refers to yearly income in SEK. Pairwise comparisons using Pearson’s Chi-square test are reported. Percentages (%) displayed refer to column percentages. P values adjusted for multiple comparisons are shown between parenthesis. Estimates in bold are statistically significant at 0.05 level.

| Hyperacusis | Any Tinnitus | Severe tinnitus (THI ≥58) |
|-------------|--------------|---------------------------|
|             | Yes (n = 1388) | No (n = 1044) | Yes (n = 156) | No (n = 38) |
| Sex         | χ²(1)=48.5, p<0.0001 (<0.0001) | χ²(1)=0.75, p=0.387 (0.635) |
| Male        | 617 (44.5) | 613 (58.7) | 74 (47.4) | 21 (55.3) |
| Female      | 771 (55.6) | 431 (41.3) | 82 (52.6) | 17 (44.7) |
| Age Group   | χ²(7)=11.39, p=0.122 (0.122) | χ²(6)=3.76, p=0.709 (0.851) |
| <24         | 36 (2.6) | 20 (1.9) | 8 (5.2) | 2 (5.3) |
| 25-34       | 306 (22.1) | 186 (17.9) | 39 (25.3) | 5 (13.2) |
| 35-44       | 311 (22.5) | 228 (21.9) | 28 (18.2) | 7 (18.4) |
| 45-54       | 366 (26.4) | 286 (27.5) | 37 (24) | 10 (26.3) |
| 55-64       | 175 (12.6) | 162 (15.6) | 22 (14.3) | 9 (23.7) |
| 65-74       | 161 (11.6) | 133 (12.8) | 15 (9.7) | 4 (10.5) |
| 75-84       | 28 (2) | 24 (2.3) | 5 (3.3) | 1 (2.6) |
| >85         | 2 (0.1) | 1 (0.1) | 0 (0) | 0 (0) |
| Marital Status | χ²(4)=20.37, p=0.0004 (0.0006) | χ²(4)=7.13, p=0.129 (0.543) |
| Married     | 571 (41.1) | 481 (46.1) | 53 (34) | 16 (42.1) |
| Living with partner | 426 (30.7) | 311 (29.8) | 53 (34) | 15 (39.5) |
| Single      | 284 (20.5) | 151 (14.5) | 39 (25) | 3 (7.9) |
| Widow/Widower | 18 (1.3) | 10 (1) | 3 (1.9) | 0 (0) |
| Divorced    | 89 (6.4) | 91 (8.7) | 8 (5.1) | 4 (10.5) |
| Gross income | χ²(3)=46.51, p<0.0001 (<0.0001) | χ²(3)=2.8, p=0.424 (0.635) |
| 0 - 200 000 SEK | 204 (14.7) | 92 (8.8) | 35 (22.4) | 8 (21.1) |
| 200 001 - 450 000 SEK | 698 (50.3) | 488 (46.7) | 84 (53.9) | 21 (55.3) |
| 450 001 SEK or more | 410 (29.5) | 428 (41) | 22 (14.1) | 8 (21.1) |
| Don’t know/don’t want to disclose | 76 (5.5) | 36 (3.5) | 15 (9.6) | 1 (2.6) |
| Education Level | χ²(3)=11.77, p=0.008 (0.01) | χ²(3)=4.88, p=0.181 (0.543) |
| Middle School | 33 (2.4) | 30 (2.9) | 11 (7.1) | 3 (7.9) |
| High School  | 276 (19.9) | 237 (22.7) | 46 (29.5) | 15 (39.5) |
| University   | 929 (66.9) | 703 (67.3) | 75 (48.1) | 19 (50) |
| Other        | 150 (10.8) | 74 (7.1) | 24 (15.4) | 1 (2.6) |
| Employment status | χ²(10)=75.25, p<0.0001 (<0.0001) | χ²(8)=4.44, p=0.816 (0.816) |
| Don’t know   | 1 (0.1) | 0 (0) | 0 (0) | 0 (0) |
| Employed     | 836 (60.2) | 672 (64.4) | 76 (48.7) | 21 (55.3) |
| Unemployed   | 23 (1.7) | 8 (0.8) | 7 (4.5) | 1 (2.6) |
| Running my own business/Working as a partner in a company | 165 (11.9) | 138 (13.2) | 11 (7.1) | 4 (10.5) |
| Retired      | 171 (12.3) | 142 (13.6) | 20 (12.8) | 4 (10.5) |
| Sick leave (for more than two month) or disability pension due to illness or disability | 76 (5.5) | 18 (1.7) | 23 (14.7) | 4 (10.5) |
| Parental leave (since two months or longer) | 20 (1.4) | 19 (1.8) | 2 (1.3) | 1 (2.6) |
| Student      | 68 (4.9) | 33 (3.2) | 15 (9.6) | 2 (5.3) |
| Sabbatical   | 4 (0.3) | 1 (0.1) | 0 (0) | 0 (0) |
| Housewife/Husband | 0 (0) | 1 (0.1) | 0 (0) | 0 (0) |
| Other        | 24 (1.7) | 12 (1.2) | 2 (1.3) | 1 (2.6) |
Table S3. Questionnaire scores from participants with tinnitus with or without hyperacusis. Values are mean (± SD). Pairwise comparisons using Wilcoxon’s tests are reported below the compared values. P values adjusted for multiple comparisons are shown between parenthesis. Abbreviations: Numerical Rating Score (NRS), Tinnitus loudness (Lo), Awareness (Aw), Annoyance (An), Tinnitus Handicap Inventory (THI), Tinnitus Functional Index (TFI), Fear of Tinnitus Questionnaire (FTQ), Tinnitus Catastrophising Scale (TCS), Hyperacusis Questionnaire (HQ), Perceived Stress Questionnaire (PSQ), Hospital Anxiety Depression Scales for Anxiety (HADS A) and depression (HADS D), Quality of Life (QoL) subscales from the World Health Organization: Physical (Phy), Psychological (Psych), Social (Soc), and Environmental (Env). Estimates in bold are statistically significant at 0.05 level.

| Hyperacusis | Any Tinnitus | Severe tinnitus (THI ≥58) |
|-------------|-------------|--------------------------|
|             | Yes (n = 1388) | No (n = 1044)             | Yes (n = 156) | No (n = 38) |
|             | Mean (SD) | Mean (SD) | Mean (SD) | Mean (SD) |
| NRS Lo      | 43.7 (25.84) | 36.9 (24.3) | 74.9 (19.07) | 71.5 (22.19) |
|             | -6.46, p<0.0001 (<0.0001) | -6.0, p=0.55 (0.872) |
| NRS Aw      | 36.5 (32.41) | 28.8 (29.19) | 73.8 (26.1) | 78.4 (22.45) |
|             | -5.97, p<0.0001 (<0.0001) | 0.94, p=0.346 (0.872) |
| NRS An      | 23 (27.23) | 15.5 (21.9) | 65 (26.55) | 66.7 (28.65) |
|             | -8.06, p<0.0001 (<0.0001) | 0.55, p=0.584 (0.872) |
| THI         | 25.8 (22.21) | 16.2 (16.67) | 73.6 (12.22) | 72 (10.18) |
|             | -12.05, p<0.0001 (<0.0001) | -0.49, p=0.624 (0.872) |
| TFI         | 25.4 (22.45) | 17.1 (17.63) | 66.8 (15.91) | 65.5 (15.45) |
|             | -9.48, p<0.0001 (<0.0001) | -0.42, p=0.676 (0.872) |
| PSQ         | 0.4 (0.18) | 0.3 (0.17) | 0.5 (0.17) | 0.5 (0.21) |
|             | -10.89, p<0.0001 (<0.0001) | -0.17, p=0.868 (0.876) |
| HADS_A      | 6.7 (4.3) | 5.3 (3.79) | 10.6 (4.42) | 10.7 (4.74) |
|             | -8.27, p<0.0001 (<0.0001) | 0.19, p=0.848 (0.876) |
| HADS_D      | 6.7 (4.3) | 5.3 (3.79) | 10.6 (4.42) | 10.7 (4.74) |
|             | -8.18, p<0.0001 (<0.0001) | 0.65, p=0.519 (0.872) |
| FTQ         | 5.2 (2.83) | 4.1 (2.42) | 9.5 (2.88) | 9.1 (2.46) |
|             | -10.12, p<0.0001 (<0.0001) | -1.08, p=0.279 (0.872) |
| TCS         | 14.2 (10.84) | 10.4 (9.29) | 30.5 (9.26) | 31.5 (7.89) |
|             | -9.28, p<0.0001 (<0.0001) | 0.66, p=0.511 (0.872) |
| HQ          | 20.4 (8.75) | 11.9 (7.64) | 28.1 (7.4) | 20.5 (9.63) |
|             | -22.72, p<0.0001 (<0.0001) | -4.44, p<0.0001 (0.0008) |
| QoL Phy     | 15.2 (2.83) | 16.3 (2.44) | 12.4 (2.84) | 12.9 (2.83) |
|             | 9.58, p<0.0001 (<0.0001) | 0.96, p=0.338 (0.872) |
| QoL Psy     | 14.4 (2.8) | 15.4 (2.4) | 11.9 (2.97) | 12 (2.49) |
|             | 9.14, p<0.0001 (<0.0001) | 0.39, p=0.697 (0.872) |
| QoL Social  | 13.9 (3.17) | 14.5 (2.9) | 12.5 (3.43) | 12.5 (3.31) |
|             | 4.74, p<0.0001 (<0.0001) | 0.16, p=0.876 (0.876) |
| QoL Env     | 16 (2.37) | 16.7 (1.96) | 14.2 (2.68) | 14.6 (2.64) |
|             | 7.63, p<0.0001 (<0.0001) | 0.75, p=0.452 (0.872) |
Table S4. Phenotypic characteristics for participants with tinnitus with or without hyperacusis. Pairwise comparisons using Pearson’s Chi-square test are reported. Percentages (%) displayed refer to column percentages. P values adjusted for multiple comparisons are shown between parenthesis. Estimates in bold are statistically significant at 0.05 level.

| Hyperacusis | Any Tinnitus (n = 1388) | Severe tinnitus (THI ≥58) (n = 156) |
|-------------|------------------------|------------------------------------|
|             | Yes (%) | No (%) | Yes (%) | No (%) | Yes (%) | No (%) |
| Tinnitus onset |        |        |        |        |        |        |
| Don’t know    | 108 (7.8) | 109 (10.4) | 4 (2.6) | 0 (0) |
| 0 to 6 months | 25 (1.8)  | 25 (2.4)  | 7 (4.5)  | 3 (7.9) |
| 6 months to 3 years | 195 (14.1) | 163 (15.6) | 28 (18) | 11 (29) |
| 3 to 10 years | 382 (27.5) | 311 (29.8) | 42 (26.9) | 6 (15.8) |
| 10 to 20 years | 446 (32.1) | 267 (25.6) | 47 (30.1) | 9 (23.7) |
| More than 20 years | 232 (16.7) | 169 (16.2) | 28 (18) | 9 (23.7) |
| Onset-related events |        |        |        |        |        |        |
| Loud blast of sound | 581 (41.9) | 383 (36.7) | 50 (32.1) | 9 (23.7) |
| Stress | 198 (14.3) | 132 (12.6) | 24 (15.4) | 10 (26.3) |
| Change in hearing | 89 (6.4) | 45 (4.3) | 18 (11.5) | 3 (7.9) |
| Head trauma | 10 (0.7) | 8 (0.8) | 1 (0.6) | 0 (0) |
| Whiplash | 11 (0.8) | 8 (0.8) | 1 (0.6) | 0 (0) |
| Other | 190 (13.7) | 136 (13) | 32 (20.5) | 6 (15.8) |
| Don’t know | 309 (22.3) | 332 (31.8) | 30 (19.2) | 10 (26.3) |
| Tinnitus occurrence |        |        |        |        |        |        |
| Occasionally (now and then) | 559 (40.3) | 508 (48.7) | 12 (7.7) | 1 (2.6) |
| Always (all the time) | 829 (59.7) | 536 (51.3) | 144 (92.3) | 37 (97.4) |
| Time of the day of tinnitus emergence |        |        |        |        |        |        |
| Don’t know | 716 (51.6) | 582 (55.8) | 50 (32.1) | 13 (34.2) |
| When awakening | 108 (7.8) | 46 (4.4) | 28 (18) | 5 (13.2) |
| In the morning | 24 (1.7) | 24 (2.3) | 4 (2.6) | 3 (7.9) |
| Around noon | 91 (6.6) | 67 (6.4) | 18 (11.5) | 5 (13.2) |
| In the afternoon | 70 (5) | 41 (3.9) | 16 (10.3) | 4 (10.5) |
| In the evening | 183 (13.2) | 119 (11.4) | 28 (18) | 6 (15.8) |
| Before sleeping | 196 (14.1) | 165 (15.8) | 12 (7.7) | 2 (5.3) |
| Perceiving the onset of tinnitus |        |        |        |        |        |        |
| Don’t know | 329 (23.7) | 302 (28.9) | 10 (6.4) | 5 (13.2) |
| Gradual | 608 (43.8) | 445 (42.6) | 64 (41) | 9 (23.7) |
| Abrupt | 451 (32.5) | 297 (28.5) | 82 (52.6) | 24 (63.2) |
| Pulsatility |        |        |        |        |        |        |
| Don’t know | 124 (8.9) | 70 (6.7) | 11 (7.1) | 5 (13.2) |
| Yes, with heart beat | 113 (8.1) | 61 (5.8) | 20 (12.8) | 4 (10.5) |
| Yes, different from heart beat | 66 (4.8) | 28 (2.7) | 19 (12.2) | 4 (10.5) |
| No | 1085 (78.2) | 885 (84.8) | 106 (68) | 25 (65.8) |
| Location of tinnitus |        |        |        |        |        |        |
| Right ear | 117 (8.4) | 72 (6.9) | 13 (8.3) | 3 (7.9) |
| Left ear | 108 (7.8) | 102 (9.8) | 15 (9.6) | 7 (18.4) |
| Both ears, worse in right | 266 (19.2) | 164 (15.7) | 29 (18.6) | 7 (18.4) |
| Both ears, worse in left | 223 (16.1) | 180 (17.2) | 37 (23.7) | 5 (13.2) |
| Both ears equally | 443 (31.9) | 354 (33.9) | 27 (17.3) | 10 (26.3) |
| Inside the head | 212 (15.3) | 165 (15.8) | 28 (18) | 5 (13.2) |
| Elsewhere | 19 (1.4) | 7 (0.7) | 7 (4.5) | 1 (2.6) |
|---|---|---|---|---|
| **Sound of tinnitus** | $\chi^2(9)=27.5$, $p=0.001$ (0.002) | $\chi^2(7)=8.74$, $p=0.272$ (0.531) |
| Tone | 256 (18.6) | 255 (24.6) | 19 (12.5) | 3 (7.9) |
| Noise | 155 (11.3) | 115 (11.1) | 11 (7.2) | 4 (10.5) |
| Crickets | 43 (3.1) | 42 (4.1) | 5 (3.3) | 2 (5.3) |
| Heartbeat | 5 (0.4) | 6 (0.6) | 2 (1.3) | 0 (0) |
| Beeping | 152 (11.1) | 136 (13.1) | 12 (7.9) | 8 (21.1) |
| Morse Code | 2 (0.2) | 1 (0.1) | 0 (0) | 0 (0) |
| An alarm | 11 (0.8) | 8 (0.8) | 4 (2.6) | 1 (2.6) |
| Other | 44 (3.2) | 21 (2.2) | 7 (4.6) | 3 (7.9) |
| Don’t know | 0 (0) | 2 (0.2) | 0 (0) | 0 (0) |
| Complex | 706 (51.4) | 451 (43.5) | 92 (60.5) | 17 (44.7) |
| **Tinnitus loudness variation from day to day** | $\chi^2(5)=25.38$, $p=0.0001$ (0.0002) | $\chi^2(5)=6.58$, $p=0.254$ (0.531) |
| Don’t know | 78 (5.6) | 76 (7.3) | 3 (1.9) | 0 (0) |
| Never | 88 (6.3) | 96 (9.2) | 7 (4.5) | 5 (13.2) |
| Seldom | 183 (13.2) | 184 (17.6) | 18 (11.5) | 7 (18.4) |
| Sometimes | 549 (39.6) | 358 (34.3) | 67 (43) | 12 (31.6) |
| Often | 341 (24.6) | 215 (20.6) | 39 (25) | 9 (23.7) |
| Always | 149 (10.7) | 115 (11) | 22 (14.1) | 5 (13.2) |
| **Pitch of tinnitus** | $\chi^2(4)=5.75$, $p=0.218$ (0.218) | $\chi^2(4)=5.26$, $p=0.262$ (0.531) |
| Don’t know | 59 (4.3) | 35 (3.4) | 2 (1.3) | 2 (5.3) |
| Very high frequency | 347 (25) | 244 (23.4) | 55 (35.3) | 15 (39.5) |
| High frequency | 625 (45) | 462 (44.3) | 63 (40.4) | 13 (34.2) |
| Medium frequency | 261 (18.8) | 209 (20) | 28 (18) | 4 (10.5) |
| Low frequency | 96 (6.9) | 94 (9) | 8 (5.1) | 4 (10.5) |
| **Reduction of tinnitus by music or environmental sounds** | $\chi^2(2)=10.21$, $p=0.006$ (0.008) | $\chi^2(2)=1.27$, $p=0.53$ (0.731) |
| Don’t know | 324 (23.3) | 282 (27) | 19 (12.2) | 6 (15.8) |
| Yes | 782 (56.3) | 598 (57.3) | 86 (55.1) | 23 (60.5) |
| No | 282 (20.3) | 164 (15.7) | 51 (32.7) | 9 (23.7) |
| **Worsening of tinnitus by loud noise** | $\chi^2(2)=197.21$, $p<0.0001$ (<0.0001) | $\chi^2(2)=18.84$, $p<0.0001$ (<0.0001) |
| Don’t know | 352 (25.4) | 303 (29) | 35 (22.4) | 8 (21.1) |
| Yes | 838 (60.4) | 367 (35.2) | 104 (66.7) | 15 (39.5) |
| No | 198 (14.3) | 374 (35) | 17 (10.9) | 15 (39.5) |
| **Tinnitus affected by head movement or touch** | $\chi^2(2)=16.53$, $p=0.0003$ (0.0005) | $\chi^2(2)=3.48$, $p=0.176$ (0.527) |
| Don’t know | 289 (20.8) | 203 (19.4) | 15 (9.6) | 4 (10.5) |
| Yes | 387 (27.9) | 225 (21.6) | 83 (53.2) | 14 (36.8) |
| No | 712 (51.3) | 616 (59) | 58 (37.2) | 20 (52.6) |
| **Tinnitus affected by nap** | $\chi^2(3)=8.3$, $p=0.04$ (0.045) | $\chi^2(3)=3.52$, $p=0.319$ (0.531) |
| Don’t know | 795 (57.3) | 587 (56.2) | 54 (34.6) | 13 (34.2) |
| It mainly worsens my tinnitus | 39 (2.8) | 14 (1.3) | 19 (12.2) | 2 (5.3) |
| It mainly reduces my tinnitus | 435 (31.3) | 361 (34.6) | 71 (45.5) | 17 (44.7) |
| It has no effect | 119 (8.6) | 82 (7.9) | 12 (7.7) | 6 (15.8) |
| **Tinnitus affected by bad nights sleep** | $\chi^2(5)=54.02$, $p<0.0001$ (<0.0001) | $\chi^2(5)=1.39$, $p=0.925$ (0.957) |
| Don’t know | 506 (36.5) | 414 (39.7) | 22 (14.1) | 7 (18.4) |
| Never | 165 (11.9) | 195 (18.7) | 11 (7.1) | 3 (7.9) |
| Seldom | 102 (7.4) | 91 (8.7) | 14 (9) | 4 (10.5) |
| Sometimes | 325 (23.4) | 218 (20.9) | 40 (25.6) | 7 (18.4) |
|                        | Often     | Always    | Tinnitus affected by stress | χ²(3)=59.96, p<0.0001 (<0.0001) | χ²(2)=2.41, p=0.299 (0.531) |
|------------------------|-----------|-----------|-------------------------------|-------------------------------|-----------------------------|
|                        | 215 (15.5)| 105 (10.1)|                              |                               |                             |
| Often                  | 105 (10.1)| 45 (28.9) |                              |                               |                             |
| Always                 | 215 (15.5)| 105 (10.1)|                              |                               |                             |
| Always                 | 105 (10.1)| 45 (28.9) |                              |                               |                             |
| Tinnitus affected by stress |           |           |                               |                               |                             |
| Don’t know             | 469 (33.8)| 382 (36.6)| 25 (16)                      |                               |                               |
| Yes, it worsens my tinnitus | 675 (48.6)| 364 (34.9)| 119 (76.3)                   | 26 (68.4)                    |                             |
| Yes, it reduces my tinnitus | 242 (17.4)| 295 (28.3)| 12 (7.7)                     | 6 (15.8)                     |                             |
| No, it has no effect   | 2 (0.1)   | 3 (0.3)   | 0 (0)                        | 0 (0)                        |                             |
| Tinnitus affected by medication |χ²(2)=11.11, p=0.004 (0.006) | χ²(2)=0.19, p=0.91 (0.957) |
| Don’t know             | 1038 (74.8)| 745 (71.4)| 96 (61.5)                    | 22 (57.9)                    |                             |
| Yes                    | 43 (3.1)  | 18 (1.7)  | 16 (10.3)                    | 4 (10.5)                     |                             |
| No                     | 307 (22.1)| 281 (26.9)| 44 (28.2)                    | 12 (31.6)                    |                             |
| Contacted a clinician due to tinnitus |χ²(2)=45.07, p<0.0001 (<0.0001) | χ²(2)=1.25, p=0.536 (0.731) |
| No                     | 810 (58.4)| 745 (71.4)| 23 (14.7)                    | 7 (18.4)                     |                             |
| Yes, because of curiosity | 77 (5.6)  | 49 (4.7)  | 4 (2.6)                      | 0 (0)                        |                             |
| Yes, because I sought for help | 501 (36.1)| 250 (24)  | 129 (82.7)                   | 31 (81.6)                    |                             |
| Number of tinnitus treatments |χ²(3)=24.14, p<0.0001 (<0.0001) | χ²(3)=6.22, p=0.102 (0.435) |
| None                   | 1177 (84.8)| 949 (90.9)| 87 (55.8)                    | 17 (44.7)                    |                             |
| 1                      | 86 (6.2)  | 47 (4.5)  | 21 (13.5)                    | 8 (21.1)                     |                             |
| 2-4                    | 86 (6.2)  | 39 (3.7)  | 26 (16.7)                    | 11 (29)                      |                             |
| 5 or more              | 39 (2.8)  | 9 (0.9)   | 22 (14.1)                    | 2 (5.3)                      |                             |
| Tinnitus occurrence in family |χ²(1)=24.59, p<0.0001 (<0.0001) | χ²(1)=3.41, p=0.065 (0.435) |
| No                     | 1086 (78.2)| 899 (86.1)| 108 (69.2)                   | 32 (84.2)                    |                             |
| Yes                    | 302 (21.8)| 145 (13.9)| 48 (30.8)                    | 6 (15.8)                     |                             |
### Table S5. Comorbidities in participants with tinnitus with or without hyperacusis.

Pairwise comparisons using Pearson’s Chi-square test are reported. Percentages (%) displayed refer to column percentages. P values adjusted for multiple comparisons are shown between parenthesis. Estimates in bold are statistically significant at 0.05 level.

| Hyperacousis | Any Tinnitus | Severe tinnitus (THI ≥58) |
|--------------|--------------|---------------------------|
|              | Yes (n=1388) | No (n=1044)               |
|              | n (%)        | n (%)                     |
|              | Yes (n=156)  | No (n=38)                 |
|              | n (%)        | n (%)                     |
| **Hearing problem** | | |
| Don’t know   | 226 (16.3)   | 167 (16)                  |
|             | 13 (8.3)     | 19 (50)                   |
| Yes          | 720 (51.9)   | 492 (47.1)                |
|             | 103 (66)     | 19 (50)                   |
| No           | 442 (31.8)   | 385 (36.9)                |
|             | 40 (25.6)    | 15 (39.5)                 |
| **Hearing aids** | | |
| Yes, on both ears | 101 (7.3) | 47 (4.5) |
|             | 25 (16)      | 7 (18.4)                  |
| Yes, on the right ear | 14 (1) | 7 (0.7)  |
|             | 4 (2.6)      | 2 (5.3)                   |
| Yes, on the left ear | 18 (1.3) | 11 (1.1)  |
|             | 4 (2.6)      | 3 (7.9)                   |
| No           | 1255 (90.4)  | 979 (93.8)                |
|             | 123 (78.9)   | 26 (68.4)                 |
| **Problems tolerating sounds** | | |
| Never        | 4 (0.3)      | 103 (9.9)                 |
|             | 0 (0)        | 0 (0)                     |
| Rarely       | 62 (4.5)     | 328 (31.4)                |
|             | 4 (2.6)      | 6 (15.8)                  |
| Sometimes    | 483 (34.8)   | 437 (41.9)                |
|             | 29 (18.6)    | 13 (34.2)                 |
| Usually      | 517 (37.3)   | 141 (13.5)                |
|             | 53 (34)      | 11 (29)                   |
| Always       | 322 (23.2)   | 35 (3.4)                  |
|             | 70 (44.9)    | 8 (21.1)                  |
| **Headache** | | |
| Don’t know   | 42 (3)       | 5 (0.5)                   |
|             | 6 (3.9)      | 0 (0)                     |
| Yes          | 427 (30.8)   | 194 (18.6)                |
|             | 62 (39.7)    | 14 (36.8)                 |
| No           | 919 (66.2)   | 845 (80.9)                |
|             | 88 (56.4)    | 24 (63.2)                 |
| **Temporomandibular problems** | | |
| Don’t know   | 73 (5.3)     | 22 (2.1)                  |
|             | 10 (6.4)     | 3 (7.9)                   |
| Yes          | 326 (23.5)   | 126 (12.1)                |
|             | 59 (37.8)    | 7 (18.4)                  |
| No           | 989 (71.3)   | 896 (85.8)                |
|             | 87 (55.8)    | 28 (73.7)                 |
| **Vertigo/dizziness** | | |
| Don’t know   | 70 (5)       | 26 (2.5)                  |
|             | 6 (3.9)      | 0 (0)                     |
| Yes          | 381 (27.5)   | 186 (17.8)                |
|             | 54 (34.6)    | 5 (13.2)                  |
| No           | 937 (67.5)   | 832 (79.7)                |
|             | 96 (61.5)    | 33 (86.8)                 |
| **Neck pain** | | |
| Don’t know   | 27 (2)       | 13 (1.3)                  |
|             | 2 (1.3)      | 1 (2.6)                   |
| Yes          | 514 (37)     | 263 (25.2)                |
|             | 80 (51.3)    | 17 (44.7)                 |
| No           | 847 (61)     | 768 (73.6)                |
|             | 74 (47.4)    | 20 (52.6)                 |
| **Other pain syndromes** | | |
| Don’t know   | 25 (1.8)     | 13 (1.3)                  |
|             | 4 (2.6)      | 2 (5.3)                   |
| Yes          | 386 (27.8)   | 187 (17.9)                |
|             | 63 (40.4)    | 9 (23.7)                  |
| No           | 977 (70.4)   | 844 (80.8)                |
|             | 89 (57.1)    | 27 (71.1)                 |
| **Under psychiatric treatment** | | |
| Don’t know   | 6 (0.4)      | 9 (0.9)                   |
|             | 0 (0)        | 0 (0)                     |
| Yes          | 157 (11.3)   | 51 (4.9)                  |
|             | 30 (19.2)    | 7 (18.4)                  |
| No           | 1225 (88.3)  | 984 (94.3)                |
|             | 126 (80.8)   | 31 (81.6)                 |
| **Diagnosed disease** | | |
| Yes          | 479 (34.5)   | 327 (31.3)                |
|             | 58 (37.2)    | 14 (36.8)                 |
| No           | 909 (65.5)   | 717 (68.7)                |
|             | 98 (62.8)    | 24 (63.2)                 |
