**Supplementary analysis:**

**Including individuals with probable psychosis**

**eFig 1:** Prevalence of hallucinations across age, including individuals with probable psychosis

**eFig 2:** Prevalence of hallucinations across age by sex, including individuals with probable psychosis

**eFig 3:** Prevalence of mental disorder across age (including individuals with probable psychosis)

**eFig 4:** Prevalence of mental disorder across age, by sex (including individuals with probable psychosis).

**eFig 5:** Prevalence of mental disorder across age, by hallucinations (including individuals with probable psychosis).

**eFig 6:** Prevalence of suicidal ideation across age, including individuals with probable psychosis.

**eFig 7:** Prevalence of suicidal ideation across age, by sex, including individuals with probable psychosis

**eFig 8:** Prevalence of suicidal ideation across age, by hallucinations, including individuals with probable psychosis

**eFig 9:** Prevalence of suicide attempt across age, including individuals with probable psychosis.

**eFig10:** Prevalence of suicide attempt across age, by sex, including individuals with probable psychosis

**eFig 11:** Prevalence of suicide attempt across age, by hallucinations, including individuals with probable psychosis

**Table S1:** Prevalence of mental disorders across age, including individuals with probable psychosis

**Table S2:** Prevalence of suicidal ideation and attempt across age, including individuals with probable psychosis

**Excluding individuals aged 80+**

**eFig 12 :** Prevalence of hallucinations across age, excluding 80+

**Table S3:** Prevalence of mental health disorders in 70 - 79 year olds, by hallucinations

**Table S4:** The relationship between hallucinations and suicidal ideation and attempt in individuals aged 70-79

**Supplementary analysis stratified by sex**

**eFig 13:** Prevalence of hallucinations across age, by sex

**eFig 14:** Prevalence of mental disorders across age, by sex and hallucinations

**eFig 15:** Prevalence of suicidal ideation across age, by sex

**eFig 16:** Prevalence of suicide attempt across age, by sex and hallucinations

**Table S5:** Prevalence of mental disorder across age groups, by hallucinations in males

**Table S6:** Prevalence of mental disorder across age groups, by hallucinations in females

**Table S7:** Prevalence of suicidal ideation and attempt across age, by hallucinations in males

**Table S8:** Prevalence of suicidal ideation and attempt across age, by hallucinations in females

**Supplementary analysis including individuals with probable psychosis**

**eFig 1: Prevalence of hallucinations across age, including individuals with probable psychosis**

There was a significant decreasing trend of hallucination across the seven age groups; z = -7.22, p < 0.001.

**eFig 2: Prevalence of hallucinations across age by sex, including individuals with probable psychosis**

There was a significant decreasing trend of hallucination across the seven age groups for males (z = -5.262, p < 0.001) and females (- 5.05, p < 0.001).

**eFig 3: Prevalence of mental disorder across age (including individuals with probable psychosis)**

There was a significant decreasing trend of mental disorder across the seven age groups; z = -10.86, p < 0.001.

**eFig 4: Prevalence of mental disorder across age, by sex (including individuals with probable psychosis).**

There was a significant decreasing trend of mental disorder across the seven age groups in males (z = - 4.54, p <0.001) and females (z = -10.55, p < 0.001).

**eFig 5: Prevalence of mental disorder across age, by hallucinations (including individuals with probable psychosis).**

There was a significant decreasing trend of mental disorder across the seven age groups in individuals without (z = - 8.34, p <0.001) and with (z = -2.74, p = 0.006) hallucinations.

**eFig 6: Prevalence of suicidal ideation across age, including individuals with probable psychosis.**

There was a significant decreasing trend of suicidal ideation across the seven age groups; z = -17.61, p < 0.001.

**eFig 7: Prevalence of suicidal ideation across age, by sex, including individuals with probable psychosis**

There was a significant decreasing trend of suicidal ideation across the seven age groups in males (; z = -9.87, p < 0.001) and females (z = - 14.73, p < 0.001).

**eFig 8: Prevalence of suicidal ideation across age, by hallucinations, including individuals with probable psychosis**

There was a significant decreasing trend of suicidal ideation across the seven age groups in individuals without hallucinations (; z = -16.24, p < 0.001) and individuals with hallucinations (z = - 4.86, p < 0.001).

**eFig 9: Prevalence of suicide attempt across age, including individuals with probable psychosis.**

There was a significant decreasing trend of suicide attempt across the seven age groups; z = -11.45, p < 0.001.

**eFig 10: Prevalence of suicide attempt across age, by sex, including individuals with probable psychosis**

There was a significant decreasing trend of suicide attempt across the seven age groups in males (; z = -5.63, p < 0.001) and females (z = - 10.11, p < 0.001).

**eFig 11: Prevalence of suicide attempt across age, by hallucinations, including individuals with probable psychosis**

There was a significant decreasing trend of suicide attempt across the seven age groups in individuals without hallucinations (; z = -10.07, p < 0.001) and individuals with hallucinations (z = - 3.76, p < 0.001).

**Table S1: Prevalence of mental disorders across age, including individuals with probable psychosis**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Mental health disorder** | **16-19** | | | | **20-29** | | | **30-39** | | | **40-49** | | | **50-59** | | | **60-69** | | | **70+** | | |
|  | **No HE n(%)** | | **HE n(%)** | **OR1**  **(95%CI)** | **No HE n(%)** | **HE n(%)** | **OR1**  **(95%CI)** | **No HE n(%)** | **HE n(%)** | **OR1**  **(95%CI))** | **No HE n(%)** | **HE n(%)** | **OR1**  **(95%CI)** | **No HE n(%)** | **HE n(%)** | **OR1 (95%CI)** | **No HE n(%)** | **HE n(%)** | **OR1**  **(95%CI)** | **No HE n(%)** | **HE n(%)** |  |
| Any MD | | 144 (13) | 34 (41) | **5.02**  **(3.10 - 8.14)** | 739 (16) | 106 (41) | **3.69**  **(2.83 - 4.79)** | 1,067 (17) | 129 (43) | **3.63**  **(2.87 - 4.60)** | 1,035 (18) | 131 (45) | **3.65**  **(2.87 - 4.65)** | 965 (18) | 115 (44) | **3.51**  **(2.72 - 4.53)** | 574 (12) | 54 (32) | **3.43**  **(2.45-4.80)** | 441 (9) | 23 (23) | **2.87**  **(1.78-4.64)** |
| MAD | | 79  (7) | 17 (21) | 3.57  (1.98 - 6.45) | 408 (9) | 28 (11) | 1.25  (0.83 - 1.87) | 583 (9) | 63 (21) | **2.56**  **(1.92 -3.43)** | 493 (9) | 44 (15) | **1.87**  **(1.34 - 2.62)** | 434 (8) | 37 (14) | **1.83**  **(1.27 - 2.63)** | 293 (6) | 23 (14) | **2.38**  **(1.51-3.76)** | 168 (5) | 12 (12) | **2.73**  **(1.47-5.10)** |
| GAD | | 22  (2) | 5  (6) | 3.39  (1.21 - 9.51) | 157 (4) | 34 (13) | **4.37**  **(2.93 - 6.52)** | 276 (4) | 39 (13) | **3.24**  **(2.27 - .64)** | 343 (6) | 51 (18) | **3.27**  **(2.37 - 4.52)** | 344 (7) | 50 (19) | **3.37**  **(2.43 - 4.67)** | 176 (4) | 21 (13) | **3.72**  **(2.29-6.03)** | 106 (3) | 4  (4) | 1.32  (0.45-3.67) |
| Depression | | 18  (2) | 7  (8) | **5.78**  **(2.33 - 4.36)** | 115 (3) | 33 (13) | **5.79**  **(3.83 - 8.75)** | 159 (3) | 24  (8) | **3.32**  **(2.12 - .19)** | 197 (4) | 41 (14) | **4.50**  **(3.13 - 6.46)** | 193 (4) | 36 (14) | **4.18**  **(2.85 - 6.13)** | 76  (2) | 12  (7) | **4.55**  **(2.41-8.59)** | 53  (2) | 3  (3) | 2.03  (0.62-6.60) |
| Any phobia | | 20  (2) | 9  (11) | **6.51**  **(2.84 -14.89)** | 95  (2) | 25 (10) | **5.12**  **(3.22 - 8.14)** | 133 (2) | 23  (8) | **3.84**  **(2.42 -6.08)** | 111 (2) | 39 (13) | **7.45**  **(5.04 - 11.02)** | 107 (2) | 33 (13) | **6.91**  **(4.57 - 10.46)** | 51  (1) | 4  (2) | 2.23  (0.79-6.24) | 15  (0) | 3  (3) | **7.10**  **(2.03-25.00)** |
| OCD | | 11  (1) | 5  (6) | **6.80**  **(2.28 - 0.28)** | 65  (1) | 20  (8) | **5.84**  **(3.48 - 9.82)** | 81  (1) | 11  (4) | **2.87**  **(1.51 -5.44)** | 63  (1) | 17  (6) | **5.48**  **(3.16 - 9.50)** | 70  (1) | 14  (5) | **4.15**  **(2.31 - 7.48)** | 36  (1) | 5  (3) | **4.03**  **(1.55-10.44)** | 11  (0) | 2  (2) | **6.53**  **(1.43-29.88)** |
| Panic | | 13  (1) | 2  (2) | 2.07  (0.46 - 9.37) | 36  (1) | 9  (4) | **4.66**  **(2.21 - 9.82)** | 45  (1) | 6  (2) | **2.75**  **(1.16 - 6.51)** | 46  (1) | 9  (3) | **3.91**  **(1.89 - 8.08)** | 54  (1) | 7  (3) | **2.73**  **(1.23 - 6.08)** | 24  (1) | 1  (1) | 1.16  (0.16-8.64) | 17  (1) | 0  (0) | . |

1. Adjusted for cohort effects

NB: HA: hallucinations, OR: odds ratio; any MD: any mental health disorder; MAD: mixed anxiety and depression; GAD: generalised anxiety disorder; OCD: obsessive compulsive disorder

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Suicidal ideation** | | | |  | **Suicide attempt** | | | |  |
| **Age** | **No HE, n (%)** | **HE, n(%)** | **OR1 (95%CI)** | **Adj. OR2**  **(95%CI)** | **Adj. OR 3**  **(95%CI)** | **No HE,**  **n (%)** | **HE, n(%)** | **OR1 (95%CI)** | **Adj. OR2**  **(95%CI)** | **Adj. OR 3**  **(95%CI)** |
| 16-29 | 672  (20) | 100  (52) | **4.37**  **(3.36- 5.68)** | **4.35**  **(3.34 - 5.67)** | **2.06**  **(1.41 - 2.99)** | 237  (7) | 51  (26) | **4.74**  **(3.44 - 6.53)** | **4.70**  **(3.41 – 6.49)** | **2.13**  **(1.41 – 3.24)** |
| 30-49 | 1,552  (19) | 192  (46) | **3.60**  **(2.85 - 4.55)** | **3.61**  **(2.86 - 4.55)** | **1.84**  **(1.34 - 2.54)** | 483  (6) | 101  (24) | **5.04**  **(4.08 - 6.24)** | **5.06**  **(4.09 - 6.26)** | **2.46**  **(1.84 - 3.28)** |
| 50-69 | 1,156  (15) | 127  (39) | **3.42**  **(2.65 - 4.41)** | **3.37**  **(2.62 - 4.35)** | **1.85**  **(1.40 - 2.43)** | 369  (5) | 58  (18) | **4.04**  **(2.94 - 5.54)** | **3.96**  **(2.90 - 5.41)** | **1.87**  **(1.30 - 2.69)** |
| 70+ | 247  (7) | 21  (21) | **3.46**  **(2.04 – 5.88)** | **3.45**  **(2.03 – 5.87)** | **2.22**  **(1.26 – 3.92)** | 62  (2) | 7  (7) | **4.14**  **(1.81 – 9.49)** | **4.10**  **(1.78 – 9.49)** | 2.39  (0.95 – 6.01) |

**Table S2: Prevalence of suicidal ideation and attempt across age, including individuals with probable psychosis**

HA: hallucinations, OR: odds ratio

1. Adjusted cohort effects
2. Adjusted for sex and cohort effects
3. Adjusted for sex, cohort effects and total CIS-R score

**Sensitivity analysis excluding 80+**

**eFig 12 :** Prevalence of hallucinations across age, excluding 80+

The prevalence of hallucinations significantly decreased with age (z = -6.10, p < 0.001).

**Table S3: Prevalence of mental health disorders in 70 - 79 year olds, by hallucinations**

|  |  |  |  |
| --- | --- | --- | --- |
|  | | | |
| **Mental health disorder** | **70+** | | |
|  | **No HE n(%)** | **HE n(%)** | **Unadjusted OR (95%CI)** |
| Any mental health disorder | 238 (10) | 18 (25) | **3.04 (1.76 - 5.26)** |
| Mixed Anxiety and Depression | 117 (5) | 11 (15) | **3.60 (1.84 - 7.02)** |
| Generalised anxiety Disorder | 79 (3) | 3 (4) | 1.24 (0.38 - 4.05) |
| Depression | 39 (2) | 2 (3) | 1.74 (0.41 - 7.36) |
| Any phobia | 11 (0) | 2 (3) | **5.89 (1.27 - 27.26)** |
| OCD | 9 (0) | 1 (1) | 3.75 (0.47 - 30.03) |
| Panic Disorder | 13 (1) | 0(0) | . |

The prevalence of mental disorder significantly decreased with age (z = -8.71, p < 0.001).

**Table S4: The relationship between hallucinations and suicidal ideation and attempt in individuals aged 70-79**

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  |  |  |  |  |  |  |  |  |
|  | **Suicidal ideation** | | | | | **Suicide attempt** | | | | |
| **Age** | **No HA, n** | **HA, n** |  |  |  | **No HA, n** | **HA, n** |  |  |  |
| **(%)** | **(%)** | **OR1 (95%CI)** | **OR2 (95%CI)** | **OR3 (95%C))** | **(%)** | **(%)** | **OR1 (95%CI)** | **OR2 (95%CI)** | **OR3 (95%C)** |
| 70+ | 185 (8) | 17 (23) | **3.63**  **(1.97 - 6.68)** | **3.64**  **(1.96 - 6.73)** | **2.37**  **(1.24 - 4.53)** | 24 (2) | 6 (8) | **4.28**  **(1.71 - 10.67)** | **4.28**  **(1.67 - 10.87)** | 2.43  (0.84 - 7.05) |
|

The strength of the relationship between hallucinations and suicidal ideation significantly decreased with age (z = -14.43, p < 0.001), as did the relationship between hallucinations and suicide attempt (z = -9.04, p < 0.001).

**Supplementary analysis stratified by sex**

**eFig 13: Prevalence of hallucinations across age, by sex**

There was a significant decreasing trend of hallucinations across the seven age groups for males (z = -5.16, p < 0.001) and females (z = -4.61, p < 0.001).

**eFig 14: Prevalence of mental disorders across age, by sex and hallucinations**

There was a significant decreasing trend of hallucinations across the seven age groups for males (z = -4.68, p < 0.001) and females (z = -10.23, p < 0.001).

**eFig 15: Prevalence of suicidal ideation across age, by sex**

There was a significant decreasing trend of suicidal ideation across the seven age groups for males (z = -9.67, p < 0.001) and females (z = -14.25, p < 0.001).

**eFig 16: Prevalence of suicide attempt across age, by sex and hallucinations**

There was a significant decreasing trend of suicide attempt across the seven age groups for males (z = -5.26, p < 0.001) and females (z = -9.58, p < 0.001).

**Table S5: Prevalence of mental disorder across age groups, by hallucinations in males**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Mental health disorder** | **16-19** | | | | **20-29** | | | **30-39** | | | **40-49** | | | **50-59** | | | **60-69** | | | **70+** | | |
|  | **No HE n(%)** | | **HE n(%)** | **OR1**  **(95%CI)** | **No HE n(%)** | **HE n(%)** | **OR1**  **(95%CI)** | **No HE n(%)** | **HE n(%)** | **OR1**  **(95%CI))** | **No HE n(%)** | **HE n(%)** | **OR1**  **(95%CI)** | **No HE n(%)** | **HE n(%)** | **OR1 (95%CI)** | **No HE n(%)** | **HE n(%)** | **OR1**  **(95%CI)** | **No HE n(%)** | **HE n(%)** |  |
| Any MD | | 46  (8) | 7  (21) | **3.47**  **(1.40 - 8.63)** | 229 (12) | 33 (31) | **3.46**  **(2.23 -5.35)** | 341 (13) | 44 (35) | **3.71**  **(2.53 -5.46)** | 364 (14) | 47 (41) | **4.15**  **(2.81 -6.14)** | 322 (14) | 35 (37) | **3.62 (2.35 - 5.59)** | 202 (10) | 15 (25) | **3.05**  **(1.67 -5.56)** | 92  (6) | 6  (16) | **2.78**  **(1.13 - 6.83)** |
| MAD | | 28  (5) | 5  (15) | **3.88**  **(1.35 -11.14)** | 120 (6) | 11 (10) | **1.79**  **(0.93 - 3.44)** | 176 (7) | 20 (16) | **2.69**  **(1.63 - 4.44)** | 162 (6) | 13 (11) | **1.88**  **(1.03 - 3.43)** | 138 (6) | 8  (8) | **1.46**  **(0.69 - 4.07)** | 108 (5) | 9  (15) | **3.17**  **(1.52 - 6.62)** | 54  (4) | 2  (5) | **1.47**  **(0.34 - 6.26)** |
| GAD | | 7  (1) | 0  (0) | . | 54  (3) | 7  (7) | **2.55**  **(1.12 - 5.77)** | 113 (4) | 18 (14) | **3.82**  **(2.24 - 6.52)** | 140 (6) | 18 (16) | **3.18**  **(1.86 - 5.43)** | 118 (5) | 19 (20) | **4.63**  **(2.71 - 7.93)** | 54  (3) | 4  (7) | **2.70**  **(0.94 - 7.73)** | 26  (2) | 0  (0) | . |
| Depression | | 4  (1) | 2  (6) | **10.13**  **(1.72 - 59.55)** | 37  (2) | 8  (8) | **4.44**  **(2.00 - 9.85)** | 43  (2) | 6  (5) | **3.13**  **(1.30 - 7.53)** | 67  (3) | 13 (11) | **4.57**  **(2.44 - 8.59)** | 75  (4) | 13 (14) | **4.66**  **(2.47 - 8.77)** | 31  (2) | 3  (5) | **3.48**  **(1.02 - 11.85)** | 11  (1) | 2  (5) | 7.29  (1.55 - 34.31) |
| Any phobia | | 3  (1) | 1  (3) | 6.27  (0.62 - 3.78) | 27  (1) | 5  (5) | **3.61**  **(1.36 - 9.60)** | 32  (1) | 5  (4) | **3.50**  **(1.33 - 9.16)** | 33  (1) | 12 (11) | **8.70**  **(4.33 - 17.46)** | 32  (1) | 11 (12) | **9.16**  **(4.45 -18.86)** | 12  (1) | 0  (0) | . | 1  (0) | 3  (8) | **118.5**  **(11.9 - 1179.3)** |
| OCD | | 4  (1) | 0  (0) | **.** | 22  (1) | 5  (5) | **4.36**  **(1.61 - 1.75)** | 28  (1) | 5  (4) | 3.98  (1.51 -10.53) | 19  (1) | 4  (4) | **4.81**  **(1.59 - 14.50)** | 24  (1) | 3  (3) | **3.10**  **(0.92 - 10.51)** | 12  (1) | 0  (0) | . | 4  (0) | 0  (0) | . |
| Panic | | 6  (1) | 1  (3) | 2.66  (0.31 -23.06) | 11  (1) | 4  (4) | **7.11**  **(2.21 - 22.83)** | 15  (1) | 2  (2) | **2.83**  **(0.64 -12.50)** | 19  (1) | 4  (4) | **4.99**  **(1.66 - 15.04)** | 18  (1) | 4  (4) | **5.79**  **(1.91 -17.56)** | 10  (1) | 1  (2) | 3.35  (0.42 - 26.72) | 5  (0) | 0  (0) | . |

1. Adjusted for cohort effects

NB: HA: hallucinations, OR: odds ratio; any MD: any mental health disorder; MAD: mixed anxiety and depression; GAD: generalised anxiety disorder; OCD: obsessive compulsive disorder

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Mental health disorder** | **16-19** | | | | **20-29** | | | **30-39** | | | **40-49** | | | **50-59** | | | **60-69** | | | **70+** | | |
|  | **No HE n(%)** | | **HE n(%)** | **OR1**  **(95%CI)** | **No HE n(%)** | **HE n(%)** | **OR1**  **(95%CI)** | **No HE n(%)** | **HE n(%)** | **OR1**  **(95%CI))** | **No HE n(%)** | **HE n(%)** | **OR1**  **(95%CI)** | **No HE n(%)** | **HE n(%)** | **OR1 (95%CI)** | **No HE n(%)** | **HE n(%)** | **OR1**  **(95%CI)** | **No HE n(%)** | **HE n(%)** |  |
| Any MD | | 97 (18) | 25 (52) | **5.24**  **(2.81 - 9.76)** | 502 (20) | 63 (47) | **3.67**  **(2.57 -5.23)** | 708 (20) | 68 (44) | **3.20**  **(2.30 -4.44)** | 654 (21) | 64 (42) | **2.73**  **(1.96 - 3.81)** | 630 (22) | 63 (42) | **2.72**  **(1.94 - 3.82)** | 364 (14) | 34 (34) | **3.19**  **(2.08 - 4.91)** | 238 (11) | 16 (26) | **2.78**  **(1.54 - 4.99)** |
| MAD | | 51 (10) | 12 (25) | 3.34  (1.62 - 6.88) | 287 (11) | 17 (13) | 1.15  (0.68 -1.94) | 403 (11) | 42 (27) | **2.94**  **(2.03 -4.26)** | 328 (10) | 28 (18) | **1.91**  **(1.25 - 2.92)** | 294 (10) | 26 (18) | **1.93**  **(1.24 - 3.00)** | 182 (7) | 14 (14) | **2.11**  **(1.17 - 3.79)** | 114 (6) | 10 (16) | **3.42**  **(1.69 - 6.91)** |
| GAD | | 14 (3) | 4 (8) | 3.44  (1.05 -1.30) | 97 (4) | 21 (16) | **4.85**  **(2.90 - 8.12)** | 154 (4) | 1  3 (8) | **2.10**  **(1.16 - 3.79)** | 192 (6) | 23 (15) | **2.73**  **(1.71 - 4.36)** | 219 (8) | 22 (15) | **2.15**  **(1.34 - 3.46)** | 118 (5) | 14 (14) | **3.61**  **(1.98 - 6.56)** | 80  (4) | 4  (7) | 1.75  (0.62 - 4.96) |
| Depression | | 14 (3) | 5 (10) | **4.38**  **(1.50 - 2.80)** | 75 (3) | 19 (14) | **5.49**  **(3.20 -9.42)** | 107 (3) | 8  (5) | **1.79**  **(0.86 -3.75)** | 122 (4) | 15 (10) | **2.74**  **(1.56 - 4.83)** | 110 (4) | 13  (9) | **2.49**  **(1.36 - 4.55)** | 42  (2) | 5  (5) | **2.99**  **(1.15 - 7.77)** | 42  (2) | 1  (2) | 0.82  (0.11 - 6.04) |
| Any phobia | | 17 (3) | 6 (13) | **4.28**  **(1.59 -1.55)** | 64 (3) | 14 (11) | **4.57**  **(2.49 -8.41)** | 93 (3) | 9  (6) | **2.36**  **(1.16 - 4.79)** | 70 (2) | 14 (9) | **4.52**  **(2.47 - 8.26)** | 68 (2) | 14  (9) | **4.46**  **(2.44 - 8.14)** | 37  (1) | 3  (3) | 2.15  (0.65 - 7.13) | 13  (1) | 0  (0) | **.** |
| OCD | | 7 (1) | 4 (8) | **7.15**  **(1.99 - 5.63)** | 42 (2) | 11 (8) | **5.32**  **(2.67 -0.61)** | 50 (1) | 1  (1) | 0.46  (0.06 - 3.38) | 39 (1) | 8 (5) | **4.40**  **(2.02 - 9.59)** | 42 (1) | 8  (5) | **3.85**  **(1.77 - 8.37)** | 23  (1) | 3  (3) | **3.52**  **(1.04 - 11.99)** | 7  (0) | 1  (2) | 5.05  (0.61 - 41.79) |
| Panic | | 7 (1) | 1 (2) | 1.62  (0.19 -13.61) | 25 (1) | 5 (4) | **3.94**  **(1.48 -10.52)** | 30 (1) | 3  (2) | 2.30  (0.69 - 7.64) | 27 (1) | 3 (2) | 2.34  (0.80 - 7.82) | 36 (1) | 3  (2) | 1.66  (0.50 - 5.46) | 14  (1) | 0  (0) | . | 12  (1) | 0  (0) | . |

**Table S6: Prevalence of mental disorder across age groups, by hallucinations in females**

1. Adjusted for cohort effects

NB: HA: hallucinations, OR: odds ratio; any MD: any mental health disorder; MAD: mixed anxiety and depression; GAD: generalised anxiety disorder; OCD: obsessive compulsive disorder

**Table S7: Prevalence of suicidal ideation and attempt across age, by hallucinations in males**

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Suicidal ideation** | | | | **Suicide attempt** | | | | | |  |
| **Age** | **No HA, n**  **(%)** | **HA, n**  **(%)** | **OR1 (95%CI)** | **OR2 (95%CI)** | **No HA, n (%)** | **HA, n**  **(%)** | **OR1**  **(95%CI)** |  | **OR2 (95%CI)** |
| 16-29 | 241 (16) | 33 (44) | **4.23 (2.59 – 6.90)** | **2.38 (1.19 – 4.75)** | 70 (5) | 8 (11) | **2.49 (1.23 – 5.05)** | 1.26 (0.54 – 2.93) | | |
| 30-49 | 561 (17) | 62 (39) | **3.19 (2.27 – 4.49)** | **1.40 (0.91 – 2.16)** | 148 (4) | 32 (20) | **5.46 (3.67 – 8.12)** | **2.33 (1.37 – 3.96)** | | |
| 50-69 | 439 (12) | 41 (36) | **3.56 (2.45 – 5.17)** | **1.93 (1.24 – 3.01)** | 124 (4) | 14 (12) | **3.43 (2.02 – 5.81)** | 1.66 (0.89 – 3.10) | | |
| 70+ | 81 (6) | 4 (11) | 1.91 (0.66 – 5.48) | 1.20 (0.41 – 3.48) | 15 (1) | 2 (5) | **5.20 (1.15 – 23.59)** | **2.99 (0.58 – 15.36)** | | |

1. Adjusted for cohort effects
2. Adjusted for cohort effects and total CIS-R score

HA: hallucinations, OR: odds ratio

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Suicidal ideation** | | | | **Suicide attempt** | | | | | |  |
| **Age** | **No HA, n**  **(%)** | **HA, n**  **(%)** | **OR1 (95%CI)** | **OR2 (95%CI)** | **No HA, n (%)** | **HA, n**  **(%)** | **OR1**  **(95%CI)** |  | **OR2 (95%CI)** |
| 16-29 | 422 (23) | 54 (51) | **3.64 (2.55 – 5.19)** | **1.69 (1.03 – 2.77)** | 159 (9) | 32 (30) | **4.67 (3.13 – 6.98)** | **2.26 (1.31 – 3.89)** | | |
| 30-49 | 950 (20) | 92 (43) | **2.93 (2.24 – 3.83)** | **1.81 (1.24 – 2.64)** | 305 (7) | 40 (19) | **3.30 (2.44 – 4.45)** | **1.91 (1.37 – 2.67)** | | |
| 50-69 | 692 (17) | 69 (37) | **2.89 (2.12 – 3.93)** | **1.90 (1.35 – 2.67)** | 226 (5) | 30 (16) | **3.27 (2.12 – 5.05)** | **1.90 (1.15 – 3.16)** | | |
| 70+ | 165 (8) | 17 (28) | **4.50 (2.34 – 8.68)** | **2.96 (1.46 – 5.98)** | 46 (2) | 5 (8) | **3.96 (1.48 – 10.59)** | 2.32 (0.77 – 6.97) | | |

**Table S8: Prevalence of suicidal ideation and attempt across age, by hallucinations in females**

1. Adjusted for cohort effects
2. Adjusted for cohort effects and total CIS-R score

HA: hallucinations, OR: odds ratio