|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Appendix table 1. Bivariate analysesa of the association of mental disorder diagnosis with treatment drop out within each country income group among World Mental Health Survey respondents with at least one disorder in the 12 months before interview and received mental health treatment. Results for any of the three servicesb, stratified by number of visit** | | | | | | | | | | | | | | | |
|  |  | | | | | | |  |  | | | | | | |
|  | **High income countries** | | | | | | |  | **Low-Middle income countries** | | | | | | |
|  | **1-2 visits**  **n=1739** | | |  | **3+ visits**  **n=2048** | | |  | **1-2 visits**  **n=657** | | |  | **3+ visits**  **n=546** | | |
|  | **OR** | **(95% CI)** | **2 (p-value)** |  | **OR** | **(95% CI)** | **2 (p-value)** |  | **OR** | **(95% CI)** | **2 (p-value)** |  | **OR** | **(95% CI)** | **2 (p-value)** |
| **Disorder typec** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Any anxietyd | 1.2 | (0.9-1.4) | 0.195 |  | 0.9 | (0.6-1.3) | 0.672 |  | 1.2 | (0.9-1.6) | 0.252 |  | 0.4\*\*\* | (0.2-0.6) | <.0001 |
| Any moode | 0.8\* | (0.7-1.0) | 0.032 |  | 0.6\*\* | (0.4-0.9) | 0.009 |  | 0.8 | (0.6-1.1) | 0.145 |  | 1.5\* | (1.1-2.0) | 0.011 |
| Any substancef | 0.7 | (0.5-1.0) | 0.077 |  | 1.4 | (1.0-2.1) | 0.063 |  | 0.6\* | (0.4-1.0) | 0.049 |  | 2.7\*\*\* | (1.6-4.5) | 0.000 |
| Any impulseg | 1.0 | (0.7-1.5) | 0.974 |  | 0.7 | (0.4-1.2) | 0.144 |  | 0.7 | (0.5-1.1) | 0.102 |  | 0.9 | (0.4-1.8) | 0.737 |
| Panic disorder | 0.8 | (0.7-1.1) | 0.184 |  | 0.4\*\* | (0.2-0.7) | 0.001 |  | 0.8 | (0.6-1.2) | 0.277 |  | 0.1\*\*\* | (0.0-0.3) | 0.000 |
| Generalized anxiety disorder | 0.9 | (0.7-1.1) | 0.364 |  | 0.8 | (0.6-1.2) | 0.374 |  | 1.0 | (0.7-1.3) | 0.787 |  | 0.2\*\*\* | (0.1-0.4) | <.0001 |
| Social phobia | 0.8 | (0.7-1.0) | 0.098 |  | 0.8 | (0.5-1.2) | 0.277 |  | 1.0 | (0.8-1.4) | 0.799 |  | 0.8 | (0.5-1.3) | 0.405 |
| Specific phobia | 1.3\*\* | (1.1-1.5) | 0.003 |  | 0.5\*\* | (0.3-0.8) | 0.009 |  | 1.2 | (0.8-1.6) | 0.340 |  | 0.8 | (0.4-1.7) | 0.559 |
| Agoraphobia | 0.6\* | (0.5-0.9) | 0.010 |  | 0.6\* | (0.3-1.0) | 0.044 |  | 0.7 | (0.5-1.1) | 0.122 |  | 0.5\*\* | (0.3-0.8) | 0.002 |
| PTSD | 0.7\* | (0.6-1.0) | 0.040 |  | 1.2 | (0.8-1.8) | 0.353 |  | 1.1 | (0.7-1.7) | 0.823 |  | 0.6 | (0.3-1.3) | 0.192 |
| Separation anxiety | 1.3 | (0.8-2.0) | 0.342 |  | 0.3 | (0.1-1.1) | 0.075 |  | 0.8 | (0.5-1.4) | 0.532 |  | 0.5 | (0.1-1.7) | 0.266 |
| Major depressive episode | 0.8\* | (0.6-0.9) | 0.014 |  | 0.7\* | (0.5-0.9) | 0.021 |  | 0.8 | (0.6-1.1) | 0.142 |  | 1.4\* | (1.1-1.9) | 0.014 |
| Bipolar disorder | 0.9 | (0.6-1.1) | 0.293 |  | 0.7 | (0.5-1.2) | 0.240 |  | 0.8 | (0.4-1.4) | 0.392 |  | 1.6 | (0.5-5.2) | 0.469 |
| Oppositional defiant disorder | 0.6 | (0.2-1.4) | 0.232 |  | 1.4 | (0.4-5.0) | 0.619 |  | 0.2 | (0.0-1.2) | 0.079 |  | 1.1 | (0.3-4.5) | 0.844 |
| Conduct disorder | 0.4 | (0.1-1.7) | 0.201 |  | 0.2\*\*\* | (0.1-0.3) | <.0001 |  | 1.7 | (0.6-5.2) | 0.315 |  | 1.6 | (0.2-14.3) | 0.658 |
| Attention deficit disorder | 1.1 | (0.6-1.9) | 0.724 |  | 0.6 | (0.2-1.7) | 0.340 |  | 1.9 | (0.8-4.6) | 0.127 |  | <0.1\*\*\* | (<0.1-<0.1) | <.0001 |
| Intermitent explosive disorder | 1.2 | (0.8-1.8) | 0.345 |  | 0.7 | (0.3-1.4) | 0.286 |  | 0.6\* | (0.4-0.9) | 0.018 |  | 0.9 | (0.4-2.0) | 0.771 |
| Alcohol abuse | 0.8 | (0.5-1.2) | 0.218 |  | 1.4 | (0.8-2.3) | 0.196 |  | 0.7 | (0.4-1.3) | 0.263 |  | 2.9\*\*\* | (1.7-5.1) | 0.000 |
| Alcohol dependence | 0.6 | (0.4-1.0) | 0.076 |  | 1.0 | (0.5-1.9) | 0.987 |  | 0.5 | (0.2-1.0) | 0.057 |  | 1.9 | (0.8-4.7) | 0.145 |
| Drug abuse | 0.8 | (0.5-1.4) | 0.522 |  | 1.8\* | (1.1-3.0) | 0.020 |  | 0.5 | (0.2-1.5) | 0.188 |  | 2.2\* | (1.2-4.0) | 0.010 |
| Drug dependence | 0.6 | (0.3-1.4) | 0.261 |  | 0.9 | (0.5-1.4) | 0.535 |  | 0.8 | (0.2-3.1) | 0.744 |  | 0.4 | (0.1-1.1) | 0.081 |
|  |  |  |  |  |  | |  |  |  | |  |  |  | |  |

aModels are bivariate and based on a discrete time survival framework with a person-visit file. Country is also included in the model (not shown).

bIt includes dropout from all of up to 3 different providers: Psychiatrist, Other Mental Health professional, General Medical

cReference category is not having the disorder

dAny anxiety disorder includes Panic Disorder, Generalized Anxiety Disorder, Social Phobia, Specific Phobia, Agoraphobia, PTSD, Social Anxiety

eAny mood disorder includes Major Depressive Episode, Dysthymia and Bipolar Disorder

fAny substance disorder includes Alcohol Abuse, Alcohol Dependence, Drug Abuse, Drug Dependence

gAny impulse control disorder includes Opositional Defiant Disorder, Conduct disorder, Attention Deficit Disorder, Intermitent Explosive Disorder

\* p<0.05

\*\*p<0.01

\*\*\*p<0.001

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Appendix table 2. Bivariate associations of health insurance type with treatment dropout after 1-2 and 3+ visits among patients with 12-month DSM-IV/CIDI disorders in the WMH surveys1** | | | | | | | | | | | | | | |
|  |  | | |  | | |  | | |  | | |  |  |
|  | **State funded coverage or subsidized insurance** | | | **Insurance through employment or national social security** | | | **Direct private/optional insurance** | | | **Other types of insurance** | | |  |  |
|  | **OR** | **(95% CI)** | **%** | **OR** | **(95% CI)** | **%** | **OR** | **(95% CI)** | **%** | **OR** | **(95% CI)** | **%** | **24  (p-value)** | **Sample size** |
| **I. High income countries** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **After 1-2 visits** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Psychiatrist (whether or not have received other service) | 0.6 | (0.1-2.8) | 14.7 | 0.6 | (0.2-1.4) | 44.4 | 0.3 | (0.1-1.1) | 12.4 | 2.2 | (0.5-9.8) | 2.2 | 0.195 | 225 |
| Not psychiatrist but other mental health (whether or not received general medical) | 0.4 | (0.1-1.3) | 7.7 | 0.8 | (0.3-2.4) | 34.9 | 0.4 | (0.1-2.0) | 13.3 | 0.5 | (0.1-3.7) | 1.5 | 0.374 | 195 |
| General medical (only) | 0.7 | (0.4-1.3) | 9.9 | 1.0 | (0.6-1.8) | 29.6 | 0.8 | (0.4-1.4) | 13.0 | 1.0 | (0.3-3.4) | 0.9 | 0.550 | 1319 |
| Any of the three services | 0.6 | (0.4-1.1) | 10.2 | 0.8 | (0.5-1.2) | 32.1 | 0.6\* | (0.4-0.9) | 13.0 | 1.0 | (0.4-2.5) | 1.2 | 0.080 | 1739 |
| **After 3+ visits** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Psychiatrist (whether or not have received other service) | 0.1\* | (0.0-0.6) | 13.9 | 0.2\* | (0.1-0.5) | 40.4 | 0.2\* | (0.1-0.5) | 15.6 | 0.0\* | (0.0-0.0) | 1.3 | <.0001 | 972 |
| Not psychiatrist but other mental health (whether or not received general medical) | 2.7 | (0.4-17.7) | 7.9 | 3.8 | (0.6-22.8) | 31.6 | 1.2 | (0.2-6.9) | 14.2 | 1.0 | (0.1-11.9) | 1.9 | 0.291 | 633 |
| General medical (only) | 0.9 | (0.2-3.4) | 7.5 | 0.9 | (0.1-8.0) | 27.3 | 0.9 | (0.1-9.6) | 13.3 | --2 |  | 0.7 | -- 2 | 443 |
| Any of the three services | 0.4 | (0.1-1.3) | 10.6 | 0.6 | (0.3-1.4) | 34.9 | 0.5 | (0.2-1.2) | 14.7 | 0.3 | (0.0-1.6) | 1.4 | 0.502 | 2048 |
| **II. Low-Middle income countries** | | | | | | | | |  |  |  |  |  |  |
| **After 1-2 visits** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Psychiatrist (whether or not received other service) | 1.1 | (0.4-3.4) | 18.3 | 0.9 | (0.4-1.7) | 27.0 | 0.5 | (0.2-1.7) | 9.5 | -- 2 |  | 0.8 | -- 2 | 126 |
| Not psychiatrist but other mental health (whether or not received general medical) | 0.4 | (0.1-1.1) | 9.1 | 1.8 | (0.9-3.6) | 39.4 | 1.0 | (0.4-2.8) | 10.6 | 2.3 | (1.0-5.4) | 4.6 | 0.013 | 132 |
| General medical (only) | 4.5\* | (2.2-9.0) | 16.8 | 1.8 | (1.0-3.4) | 14.3 | 2.9\* | (1.3-6.6) | 5.5 | 5.1\* | (1.6-16.2) | 2.8 | 0.000 | 399 |
| Any of the three services | 1.5 | (0.9-2.7) | 15.5 | 1.3 | (0.7-2.1) | 21.8 | 1.1 | (0.6-2.0) | 7.3 | 1.9 | (0.6-5.5) | 2.7 | 0.558 | 657 |
| **After 3+ visits** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Psychiatrist (whether or not received other service) | 0.1\* | (0.0-0.3) | 27.1 | 0.1\* | (0.0-0.2) | 26.0 | 0.2\* | (0.1-0.5) | 11.9 | 0.1 | (0.0-1.4) | 3.7 | <.0001 | 269 |
| Not psychiatrist but other mental health (whether or not received general medical) | 0.0\* | (0.0-0.0) | 14.6 | 0.1\* | (0.0-0.1) | 27.2 | 0.1\* | (0.0-0.1) | 14.6 | 2.1\* | (1.3-3.4) | 3.9 | <.0001 | 103 |
| General medical (only) | 0.9 | (0.5-1.5) | 14.4 | 1.2 | (0.6-2.4) | 13.2 | 1.5 | (0.3-7.1) | 5.8 | 0.2\* | (0.1-0.4) | 5.2 | <.0001 | 174 |
| Any of the three services | 0.3\* | (0.2-0.6) | 20.7 | 0.4\* | (0.2-0.7) | 22.2 | 0.4\* | (0.2-0.8) | 10.4 | 0.1\* | (0.1-0.4) | 4.2 | <.0001 | 546 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

\*Significant at the .05 level, two-sided test compared to patients with no insurance

1Each model included dummy variable controls for survey and number of visits. The models for any dropout additionally controlled for treatment sector.

2Results not shown because of small cell size. Small cell size determined by calculating the expected number of cases based on the percentage of people with the outcome and the total number of people with the condition. If the expected value was less than five, then the OR is dashed out.

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
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| **Appendix table 3. Predictors of treatment dropout within each country income group respondents with at least one disorder in the 12 months before interview who received mental health treatment in the past 12 months in the World Mental Health Surveys, by country income group** | | | | | | | | | | | | | | | | |
|  |  | | | | | | | |  | | | | | | | |
|  | **1-2 visits** | | | | | | | | **3+ visits** | | | | | | | |
|  | **Any of the three services** | | **Psychiatrist (whether or not received other service)** | | **Not psychiatrist but other mental health (whether or not received general medical)** | | **General medical (only)** | | **Any of the three services** | | **Psychiatrist (whether or not received other service)** | | **Not psychiatrist but other mental health (whether or not received general medical)** | | **General medical (only)** | |
|  | **OR** | **(95% CI)** | **OR** | **(95% CI)** | **OR** | **(95% CI)** | **OR** | **(95% CI)** | **OR** | **(95% CI)** | **OR** | **(95% CI)** | **OR** | **(95% CI)** | **OR** | **(95% CI)** |
| **I. High income countries \*,1** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Gender (male vs. female) | 1.0 | (0.8-1.2) | 0.8 | (0.4-1.6) | 0.7 | (0.4-1.2) | 1.2 | (0.9-1.5) | 1.2 | (0.8-1.8) | 1.6 | (1.0-2.5) | 1.5 | (0.9-2.6) | 0.6 | (0.3-1.3) |
| Age | 1.0 | (1.0- 1.0) | 1.0 | (1.0-1.0) | 1.0 | (1.0-1.0) | 1.0\* | (1.0-1.0) | 1.0\* | (1.0-1.0) | 1.0\* | (0.9-1.0) | 1.0 | (1.0-1.0) | 1.0 | (1.0-1.0) |
| Education | 0.9 | (0.8-1.0) | 0.9 | (0.7-1.1) | 1.0 | (0.8-1.3) | 0.9 | (0.8-1.1) | 0.9 | (0.7-1.1) | 0.8 | (0.6-1.1) | 0.7 | (0.5-1.0) | 1.3 | (0.9-1.8) |
| Employed (yes vs. all others) | 1.1 | (0.9-1.4) | 1.0 | (0.6-1.6) | 0.8 | (0.4-1.4) | 1.2 | (0.9-1.5) | 1.0 | (0.6-1.5) | 2.1\* | (1.2-3.8) | 0.6 | (0.3-1.2) | 1.2 | (0.6-2.4) |
| Family income | 1.0 | (0.9-1.0) | 1.0 | (0.8-1.3) | 1.1 | (0.8-1.5) | 1.0 | (0.9-1.1) | 1.0 | (0.8-1.2) | 1.0 | (0.8-1.2) | 0.9 | (0.7-1.2) | 1.4\* | (1.0-1.9) |
| Marital Status (ref.: married or cohabiting) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Previously married | 1.2 | (1.0-1.6) | 0.9 | (0.6-1.6) | 1.0 | (0.6-1.7) | 1.5\* | (1.2-2.0) | 0.5\* | (0.3-0.8) | 0.7 | (0.3-1.5) | 0.3\* | (0.2-0.5) | 0.9 | (0.4-1.9) |
| Never married | 1.2 | (0.9-1.5) | 1.9\* | (1.0-3.6) | 0.8 | (0.5-1.4) | 1.1 | (0.8-1.5) | 0.6\* | (0.4-1.0) | 0.9 | (0.4-1.8) | 0.4\* | (0.2-0.7) | 0.6 | (0.3-1.3) |
|  22 (p-value) | 3.3 (0.189) | | 5.8 (0.056) | | 0.5 (0.782) | | 8.6 (0.014) | | 10.0 (0.007) | | 0.8 (0.672) | | 24.7 (<.0001) | | 1.5 (0.471) | |
| Global 2(p-value) | 8.0 (0.333) | | 11.4 (0.123) | | 4.8 (0.683) | | 21.7 (0.003) | | 25.8 (0.001) | | 38.3 (<.0001) | | 65.7 (<.0001) | | 13.5 (0.060) | |
| Sample size | 3787 | | 1197 | | 828 | | 1762 | | 2048 | | 972 | | 633 | | 443 | |
| **II. Low-Middle income countries** |  | |  | |  | |  | |  | |  | |  | |  | |
| Gender (female vs. male) | 0.8 | (0.6-1.1) | 0.1\* | (0.0-0.4) | 0.8 | (0.5-1.5) | 1.0 | (0.6-1.6) | 1.4 | (0.9-2.3) | 0.6 | (0.3-1.0) | 0.9 | (0.6-1.3) | 3.7\* | (1.8-7.3) |
| Age | 1.0 | (1.0-1.0) | 1.0 | (1.0-1.0) | 1.0 | (1.0-1.0) | 1.0\* | (1.0-1.0) | 1.0 | (1.0-1.0) | 1.0 | (1.0- 1.0) | 0.9\* | (0.9-0.9) | 1.0 | (1.0-1.0) |
| Education | 0.9 | (0.8-1.1) | 1.2 | (0.8-1.9) | 0.8 | (0.6-1.1) | 1.0 | (0.8-1.2) | 0.8 | (0.6-1.1) | 0.8 | (0.6- 1.2) | 0.8 | (0.6-1.1) | 0.7 | (0.5-1.1) |
| Employed (yes vs. all others) | 1.0 | (0.7-1.4) | 0.8 | (0.4-1.7) | 0.9 | (0.6-1.3) | 1.0 | (0.6-1.5) | 1.0 | (0.6-1.7) | 1.7 | (0.9- 3.3) | 1.1 | (0.7-1.7) | 1.1 | (0.8-1.4) |
| Family income | 1.1 | (0.9-1.2) | 0.8 | (0.6-1.0) | 1.0 | (0.8-1.2) | 1.1 | (1.0-1.4) | 0.9 | (0.8-1.1) | 1.2 | (1.0- 1.6) | 1.3 | (1.0-1.7) | 0.8\* | (0.6-1.0) |
| Marital status (ref.: married or cohabiting) |  |  |  |  |  | |  | |  | |  |  |  |  |  | |
| Previously married | 1.4 | (1.0-2.0) | 0.8 | (0.4-1.6) | 1.8 | (1.0-3.4) | 1.5 | (1.0-2.3) | 1.2 | (0.6-2.4) | 0.8 | (0.4-1.6) | 4.9\* | (2.1-11.2) | 1.7 | (0.8-3.9) |
| Never married | 1.2 | (0.8-1.8) | 2.6\* | (1.2-5.5) | 1.2 | (0.7-2.3) | 1.2 | (0.6-2.2) | 0.8 | (0.4-1.4) | 0.5 | (0.2-1.3) | 0.6\* | (0.4-1.0) | 1.0 | (0.4-2.8) |
| 22 (p-value) | 3.7 (0.158) | | 8.1 (0.017) | | 3.7 (0.158) | | 3.4 (0.188) | | 1.1 (0.580) | | 3.1 (0.215) | | 20.0 (<.0001) | | 2.2 (0.388) | |
| Global 2(p-value) | 11.0 (0.140) | | 22.2 (0.002) | | 10.1 (0.181) | | 16.9 (0.018) | | 6.4 (0.498) | | 11.8 (0.107) | | 51.4 (<.0001) | | 26.9 (0.000) | |
| Sample size | 1203 | | 395 | | 235 | | 573 | | 546 | | 269 | | 103 | | 174 | |
|  |  | |  | |  | |  | |  | |  | |  | |  | |

\*Significant at the .05 level, two-sided test compared to patients with the omitted category described in parentheses

1Each model included dummy variable controls for survey, number of visits, number-severity of disorders, and type of insurance. The model for any dropout additionally controlled for treatment sector.