**Supplementary Materials**

**Suicide Mortality among Psychiatric Patients in Northeast Italy. A 10-year Cohort Study**

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**Table S1.** Suicide characteristics, by modality.

|  |  |  |
| --- | --- | --- |
|  | **Modality of Suicide** |  |
|  | **Poisoning****X60–X69****(*n*=51)** | **HSS\*****X70****(*n*=191)** | **Drowning****X71****(*n*=38)** | **Firearm****X72–X74****(*n*=15)** | **Jumping****X80****(*n*=73)** | **Other causes****X75–X79****X81–X84****(*n*=39)** | ***p*-value** |
| **Gender**, *n* (%) |  |  |  |  |  |  | **<0.001** |
| Male | 21 (41.2) | 141 (73.8) | 18 (47.4) | 11 (73.3) | 36 (49.3) | 22 (56.4) |  |
| Female | 30 (58.8) | 50 (26.2) | 20 (52.6) | 4 (26.7) | 37 (50.7) | 17 (43.6) |  |
| **Age at death**, *n* (%) |  |  |  |  |  |  | **0.003** |
| <45 years | 26 (51.0) | 53 (27.7) | 11 (28.9) | 4 (26.7) | 23 (31.5) | 15 (38.5) |  |
| [45, 65) years | 19 (37.3) | 110 (57.6) | 21 (55.3) | 9 (60.0) | 26 (35.6) | 16 (41.0) |  |
| ≥65 years | 6 (11.8) | 28 (14.7) | 6 (15.8) | 2 (13.3) | 24 (32.9) | 8 (20.5) |  |
| **Time since first contact**, *n* (%) |  |  |  |  |  |  | **<0.001** |
| <2 years | 7 (13.7) | 36 (18.8) | 7 (18.4) | 4 (26.7) | 12 (16.4) | 4 (10.3) |  |
| [2, 10) years | 26 (51.0) | 109 (57.1) | 22 (57.9) | 10 (66.7) | 26 (35.6) | 13 (33.3) |  |
| ≥10 years | 18 (35.3) | 46 (24.1) | 9 (23.7) | 1 (6.7) | 35 (47.9) | 22 (56.4) |  |
| **Diagnostic group**, *n* (%) |  |  |  |  |  |  | 0.06 |
| Schizophrenia and related disorders | 6 (11.8) | 42 (22.0) | 8 (21.1) | 2 (13.3) | 22 (30.1) | 13 (33.3) |  |
| Other affective disorders | 18 (35.3) | 71 (37.2) | 15 (39.5) | 6 (40.0) | 24 (32.9) | 10 (25.6) |  |
| Neurotic, stress-related disorders | 4 (7.8) | 22 (11.5) | 2 (5.3) | 1 (6.7) | 4 (5.5) | 2 (5.1) |  |
| Other personality disorders | 8 (15.7) | 14 (7.3) | 3 (7.9) | 2 (13.3) | 12 (16.4) | 7 (17.9) |  |
| Bipolar disorder | 1 (2.0) | 14 (7.3) | 2 (5.3) | 2 (13.3) | 4 (5.5) | 4 (10.3) |  |
| Borderline personality disorder | 1 (2.0) | 3 (1.6) | 1 (2.6) | 0 (0.0) | 2 (2.7) | 0 (0.0) |  |
| Substance use disorders | 7 (13.7) | 11 (5.8) | 0 (0.0) | 0 (0.0) | 0 (0.0) | 2 (5.1) |  |
| Other diagnoses | 6 (11.8) | 14 (7.3) | 7 (18.4) | 2 (13.3) | 5 (6.8) | 1 (2.6) |  |

\*Hanging, strangulation, and suffocation.

**Table S2.** Sensitivity analysis for the Poisson regression model restricted to patients diagnosed in 2008. Mortality rate ratios (MRR) for suicide and relative 95% confidence interval (95%CI).

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | **Deaths** | **Rate (x104)** | **MRR** | **95%CI** | ***p*-value** |
| **Gender** |  |  |  |  |  |
|  Male (reference) | 75 | 11.48 | 1.00 | - | - |
|  Female | 52 | 5.02 | **0.44** | 0.31–0.63 | <0.001 |
| **Age** (years) |  |  |  |  |  |
|  <35 (reference) | 19 | 6.90 | 1.00 | - | - |
|  [35, 45)  | 18 | 5.21 | 0.72 | 0.38–1.40 | 0.349 |
|  [45, 55)  | 37 | 9.99 | 1.39 | 0.79–2.44 | 0.250 |
|  [55, 65)  | 21 | 7.64 | 1.01 | 0.54–1.90 | 0.970 |
|  ≥65 | 32 | 7.54 | 1.08 | 0.60–1.93 | 0.806 |
| **Time since first contact** |  |  |  |  |  |
| <2 months  | 11 | 37.3 | **4.07** | 1.57–10.5 | 0.004 |
|  [2 months, 2 years)  | 35 | 11.0 | 1.19 | 0.53–2.70 | 0.670 |
|  [2, 5) years | 34 | 6.80 | 0.74 | 0.33–1.67 | 0.464 |
|  [5, 10) years | 40 | 5.21 | 0.56 | 0.25–1.25 | 0.159 |
|  ≥10 years (reference) | 7 | 9.34 | 1.00 | - | - |
| **Diagnostic group** |  |  |  |  |  |
| Neurotic, stress-related disorder (reference) | 12 | 2.63 | 1.00 | - | - |
| Schizophrenia and related disorders | 6 | 4.16 | 1.43 | 0.54–3.82 | 0.474 |
| Other affective disorders | 66 | 11.0 | **4.25** | 2.28–7.91 | <0.001 |
| Other personality disorders | 7 | 7.33 | 2.45 | 0.96–6.22 | 0.061 |
| Bipolar disorder | 6 | 16.74 | **5.85** | 2.19–15.6 | <0.001 |
| Borderline personality disorder | 1 | 10.25 | 4.44 | 0.58–34.2 | 0.153 |
| Substance use disorders | 13 | 26.57 | **7.81** | 3.54–17.2 | <0.001 |
| Other diagnoses  | 16 | 5.34 | 1.96 | 0.92–4.15 | 0.079 |

**Table S3.** ANOVA (Type II) for the estimated multinomial regression model.

|  |  |  |  |
| --- | --- | --- | --- |
|  | **LRT observed value** | **Df** | ***p*-value\*** |
| Gender | 33.5 | 5 | <0.001 |
| Time since first contact | 31.9 | 10 | <0.001 |
| Age at death | 25.0 | 10 | 0.005 |

**Table S4.** Odds ratios for suicide modality with respect to the reference category\*.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **OR** | **95% CI** | ***p*-value** | **Suicide modality** |
| Gender [female] | 2.54 | 1.21–5.32 | **0.014** | Other |
| Time since first contact <2 years | 0.94 | 0.29–3.12 | 0.924 | Other |
| Time since first contact ≥10 years | 4.40 | 2.00–9.68 | **<0.001** | Other |
| Age at death <45 years | 2.29 | 1.02–5.12 | **0.044** | Other |
| Age at death ≥65 years | 1.64 | 0.62–4.37 | 0.322 | Other |
| Gender [female] | 4.75 | 2.43–9.29 | **<0.001** | Poisoning |
| Time since first contact <2 years | 0.78 | 0.30–2.03 | 0.604 | Poisoning |
| Time since first contact ≥10 years | 2.02 | 0.97–4.20 | 0.059 | Poisoning |
| Age at death <45 years | 3.39 | 1.67–6.87 | **0.001** | Poisoning |
| Age at death ≥65 years | 1.12 | 0.39–3.17 | 0.833 | Poisoning |
| Gender [female] | 3.18 | 1.55–6.52 | **0.002** | Drowning |
| Time since first contact <2 years | 0.97 | 0.38–2.48 | 0.942 | Drowning |
| Time since first contact ≥10 years | 1.06 | 0.44–2.51 | 0.903 | Drowning |
| Age at death (<45 years | 1.20 | 0.53–2.70 | 0.665 | Drowning |
| Age at death ≥65 years | 1.12 | 0.41–3.10 | 0.823 | Drowning |
| Gender [female] | 0.97 | 0.29–3.20 | 0.957 | Firearm |
| Time since first contact <2 years | 1.20 | 0.35–4.09 | 0.767 | Firearm |
| Time since first contact ≥10 years | 0.24 | 0.03–1.90 | 0.175 | Firearm |
| Age at death <45years | 0.89 | 0.26–3.06 | 0.857 | Firearm |
| Age at death ≥65 years | 0.93 | 0.19–4.58 | 0.929 | Firearm |
| Gender [female] | 3.11 | 1.73–5.61 | **<0.001** | Jumping |
| Time since first contact <2 years | 1.42 | 0.63–3.17 | 0.398 | Jumping |
| Time since first contact ≥10 years | 3.23 | 1.70–6.15 | **<0.001** | Jumping |
| Age at death <45 years | 2.14 | 1.09–4.19 | **0.027** | Jumping |
| Age at death ≥65 years | 3.18 | 1.54–6.57 | **0.002** | Jumping |

\*Reference: Suicide modality [hanging, strangulation and suffocation]; Gender [male]; Time since first contact [[2-10) years]; Age at death [ [45-65) years].