

SUICIDAL ATTEMPTS AMONG EMERGENCY DEPARTMENT PATIENTS: ONE-YEAR OF CLINICAL EXPERIENCE

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SUMMARY

Introduction: Suicidal ideation and attempts account for a significant number of Emergency Department visits and represent a major public and mental health problem. Suicide and suicide attempts are a major cause of death and morbidity worldwide.

Subjects and methods: 111 suicide attempters (81 F (73%), 30 M (27%)) were consequently recruited in the Emergency Department of the Santa Maria della Misericordia, Perugia, Italy between June 2011 and June 2012. Patients were assessed and demographic and clinical data were collected in clinical records. Data analysis was conducted using SPSS software. Chi-square test and logistic regression were used as appropriate. A p-value <0.05 was considered statistically significant.

Results: Females attempt suicide 3 times more frequently than males and generally use a non-violent suicide attempt method. In our sample unmarried status is the most represented and the most common diagnosis is major depressive disorder, followed by borderline personality disorder. Suicide attempts are more frequent in January.

Conclusion: It is of crucial importance to conduct a suicide risk assessment when subjects are admitted to an ED given that the strongest known predictor for future suicide is attempted suicide.

Key words: suicide attempt - psychiatric disorders - emergency department

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INTRODUCTION

Suicidal ideation and attempts account for a significant number of Emergency Department (ED) visits and represent a major public and mental health problem (Dubovsky 2008). Suicide and suicide attempts are a major cause of death and morbidity worldwide (Pompili 2011). In the United States suicide rate is higher in elderly white men aged 80 and older, while younger adults attempt suicide more often (Chang 2011). Females attempt suicide nearly 4 times more frequently than males, while males complete suicide 3 times more frequently than females probably because of more effective suicide methods (Spicer 2000). The majority of those who commit suicide have a psychiatric diagnosis often with a combination of depression, schizophrenia, substance abuse and personality disorders (Szanto 2007). Among psychiatric illnesses, schizophrenia (19-46%) and mood disorders (28-62.4%) account for a large number of suicide attempters/victims and are considered as the most frequent risk factors for suicide (Nakagawa 2011). In population studies some demographic characteristics such as male gender, older age, unmarried or unemployed have been reported as risk factors but they proved to be not significant (Dubovsky 2008).

SUBJECTS AND METHODS

The sample consisted of 111 suicide attempters (81 F (73%), 30 M (27%)), mean age 42.95, DS 14.76 (Range 17-89) recruited in the ED of the Santa Maria

della Misericordia, Perugia, Italy between June 2011 and June 2012.

Demographic characteristics of the sample

Gender: 81 F (73%), 30 M (27%);

Age: Mean 42.95, DS 14.76 (Range 17-89);

Marital Status: Never married 45 (40.5%), Married 37 (33.3%), Separated/Divorced 16 (14.4%), Widowed 4 (3.6%), Unknown 9 (8.1%);

Environment: Conjugal Family 37 (33.3%), Family of Origin 30 (27%), Alone 17 (15.3%), Other 18 (16.2%), Unknown 5 (4.5%);

Occupation: Blue-Collar 46 (41.4%), Unemployed 20 (18%), Retired/Disabled 11 (9.9%), Manager 3 (2.7%), Student (2.7%), White-Collar 1 (0.9%), Housewife 1 (0.9%), Other 5 (4.5%), Unknown 21 (18.9%);

Country: Italy 94 (84.7%), Romania 8 (7.2%), South America 2 (1.8%), Iran 2 (1.8%), Other 5 (4.5%)

Clinical and diagnostic characteristics of the sample

Attempted Suicide Method: Drug Overdose 59 (53.2%), Autolesionism 11 (9.9%), Jumping 3 (2.7%), Poisoning 2 (1.8%), Hanging 1 (0.9%), Unknown 4 (3.6%).

Month: Jan 18 (16.2%), June 13 (11.7%), May 12 (10.8%), Aug 12 (10.8%), Apr 11 (9.9%), Dec 10 (9%), Sep 9 (8.1%), Mar 6 (5.4%), Oct 6 (5.4%), Feb 5 (4.5%), July 5 (4.5%), Nov 4 (3.6%).

Psychiatric Assistance in the last 5 years: Departments of Mental Health 51 (45.9%), None 29 (26.1%), Private

Psychiatrist 19 (17.1%), General Practitioner 6 (5.4%), Unknown 6 (5.4%).

Psychiatric Assistance in the last 6 months: Departments of Mental Health 52 (46.8%), None 21 (18.9%), Private Psychiatrist 21 (18.9%), General Practitioner 11 (9.9%), Unknown 5 (5.4%).

Psychiatric diagnoses are shown in Figure 1.

After assessment at the emergency department, 31.5% were admitted to the Department of Mental Health, 25.2% were voluntarily hospitalized, 13.5% were hospitalised in the Medical Wards, 2.7% were admitted to hospital obligatorily, 6.3% were not hospitalized, 4.5% were followed up in the ambulatory service, 3.6% were referred to a private psychiatrist, 1.8% were referred to their General Practitioner, and 10.8% had other outcomes.

Statistical analysis

Patients were assessed and demographic and clinical data were collected from clinical records. Data analysis was conducted using SPSS software. Chi-square test and logistic regression were used as appropriate. A p-value <0.05 was considered statistically significant.

RESULTS

We considered whether gender and violent suicide methods/non-violent suicide methods are independent or dependent variables. We found that these are dependent variables that significantly influence each other. We were able to demonstrate that female patients were much less likely to carry out violent suicide attempts than males (Figure 2).

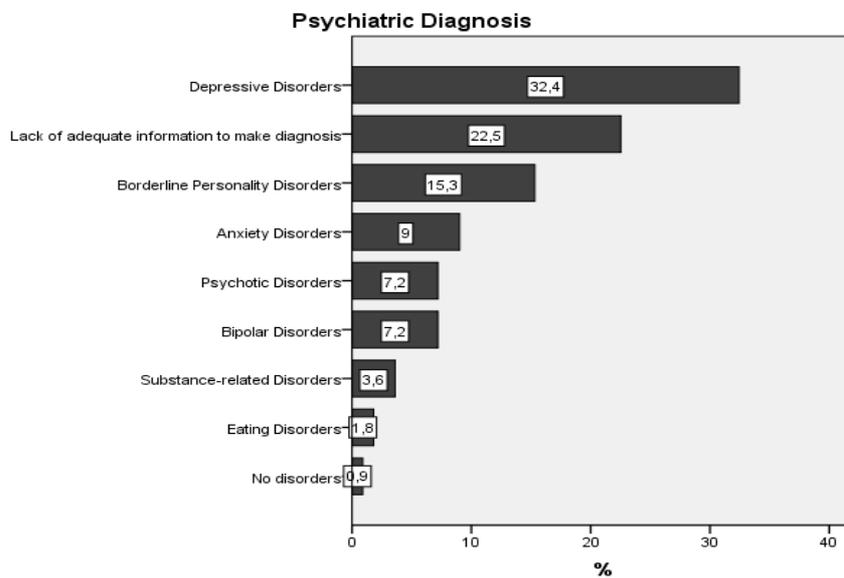


Figure 1. Psychiatric diagnoses of the sample

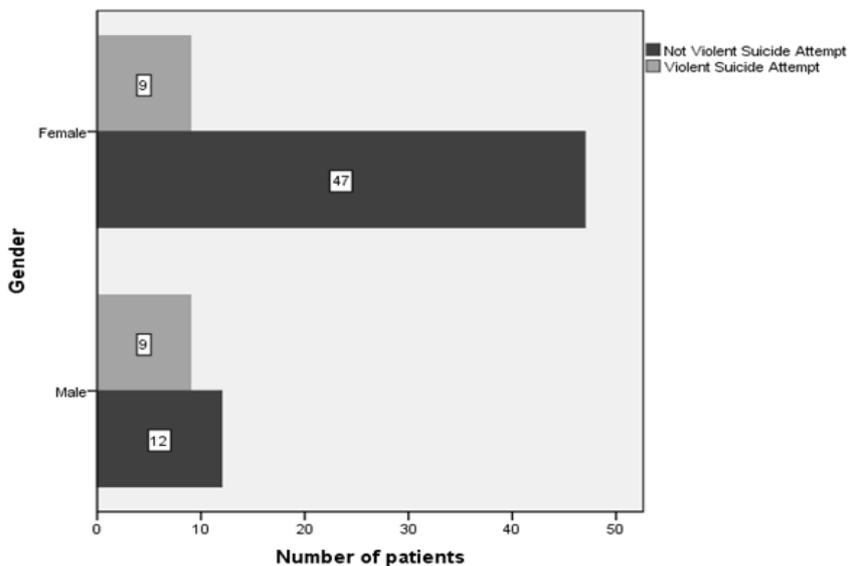


Figure 2. Gender and violent suicide methods/non-violent suicide methods are dependent variables that significantly influence each other

We analyzed socio-demographic factors (gender, marital status, environment, occupation) in order to understand if they represent possible risk factors for suicide attempts. Logistic regression showed that marital status represents a significant variable that directly correlates with suicide attempt.

We grouped patients into wider diagnostic categories (Depressive Disorder, Bipolar Disorder, Psychosis, Anxiety, Borderline Personality Disorder) and we found that suicide attempts depend on psychiatric diagnosis. We evaluated whether there is a significant difference in the seasonality of suicide rates using the Chi-square test. We found that there is a significant difference, considering that in our sample January is by far the month with highest rates of suicide attempts.

DISCUSSION

In line with previous studies (Spicer 2000) we found that females attempt suicide 3 times more frequently than males and generally use a non-violent suicide attempt method.

Although demographic characteristics proved to be not significant in population studies (Dubovsky 2008) we found that marital status represents a significant variable which directly correlates with suicide attempt.

In our sample unmarried status is the most represented status and it may be considered a possible risk factor (Lopez-Castroman 2011).

According to the literature (Nagakawa 2011), depressive disorders are the most represented in our sample and this is important if we consider that suicide attempt is significantly related to psychiatric diagnosis. (Dubovsky 2008, Pompili 2011).

Several epidemiological studies have described a seasonal variation of suicide rates, with a suicide peak in springtime. However recent studies showed that this peak is in decline (Woo 2012). In our sample we found that it is not casual that suicide attempts are more frequent in January and this fact probably correlates with the exacerbation of depressive symptoms in winter. This is in line with several studies showing that there is a decrease in suicide attempts during the Christmas holiday with a rebound increase afterwards (Sansone 2011).

CONCLUSION

It is of crucial importance to conduct a suicide risk assessment when subjects are admitted to an ED given

that the strongest known predictor for future suicide is attempted suicide itself (Pompili 2011, Lopez-Castroman 2011, Miret 2011).

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Conflict of interest: None to declare.

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