Socio-demographic and economic characteristics of patients with psychiatric pathology and non-fatal suicidal behavior

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Abstract: Suicidal behavior is an important clinical problem and a major cause of death in youth and adults. Consequently, there is a great interest in identifying risk factors and characteristics or personality traits of people with suicidal behavior in order to elaborate targeted preventing measures. In this context, the purpose of this research was to establish the socio-demographic and economic characteristics of patients with suicidal behaviour and mental disorders. We conducted a retrospective, observational study between January 1st 2010 and December 31st 2014. The statistical analyse revealed that more than half of total have an alcohol addiction, are unemployed, and have financial problems. The main psychiatric disorders which correlated with patient economic problems are major depression, bipolar disorder and anxious-depressive syndrome. Most suicide attempters were mature adults (45-54 years), followed by young adults (20-24 years). As a method of suicide, women choose mainly drug overdose ingestion, while men sharp object injury. It was also observed a seasonality of the suicide attempts.

Key Words: suicide, suicidal attempt, suicidal behavior, public health, psychiatry, mental disorder, anxiety-depression syndrome, major depression, bipolar disorder.

Suicidal behavior is a major public health problem. As it has for decades, suicide remains one of the main causes of death in the western world. In addition to the loss of life, the costs of suicide are numerous. There are mental, physical and emotional stress imposed on family members and friends. Other costs are to the public resources, because suicide attempters often require emergency medical services and psychiatric care, afterwards [1].

The World Health Organization (WHO) reports that one million people worldwide die by suicide each year, which represents an annual global mortality rate of 16 per 100,000. WHO estimates that every three seconds there is a suicide attempt, amounting to 10-20 million attempts every year [2]. The situation in Europe is rather similar, the suicide attempts are 10-40 times more frequent than completed suicides [3]. It is also noteworthy that suicide attempters in EU and worldwide are important consumers of psychiatric resources [4]. Suicide attempts are associated with significant morbidities and constitute a major predictor of later suicide [5, 6]. Consequently, there is a great interest in identifying potential risk factors for suicide among people with psychiatric pathology [7-9] with the purpose of elaborating targeted preventing measures [10-14].

Several risk factors for suicide and suicidal behavior have been identified, most notably older age, male gender, physical and mental health disorders (including depression and substance use disorders), familial and genetic influences, impulsivity, solitary habitation, poor

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psychosocial support, social acceptability, availability of the method, access to and knowledge of firearms [8, 15-20]. By far, depression seems to be the most important risk factor for suicidal behavior [21]. Worth mentioning that psychological autopsy studies suggest that at least 90% of the victims fulfilled criteria for a mental disorder at the time of suicide [7, 20]. Also, gender seems to be influencing the choice of suicide method. Usually, women tend to choose less violent and less lethal methods of suicide, like poisoning [22].

The risk of completed suicide among suicide attempters is several times higher than in the general population [23]. Any attempt might lead to more serious future suicide attempts. It has been estimated that up to 15% of attempters will eventually die by suicide [24, 25]. The risk is highest during the first few years, especially in the first six months: almost 2% of individuals who attempt suicide die within one year [23, 26].

Although suicide attempts are considered as a psychiatric emergency, only a minority of people suffering from psychiatric disorders commit suicide [27]. In both the general population and among patients with mental disorders, suicide is more frequent among males than females [28-30] and the risk is positively correlated with age [29, 30].

A recent review considers personality and individual differences, along with cognitive factors, social aspects and negative life events, as contributors to suicidal behavior [31].

The relationship between educational level and suicide remains controversial. While some studies report that suicidality is not affected by years of education [32], others have found that both low education level [33] and completion of higher education [34] are associated with increased risk of suicide.

Unemployment has been shown to increase the risk of suicide among the mentally ill [35]. Periods of economic recession are associated with rises in suicide because it has an impact on population mental health [36-38]. Key stressors include job loss, debt, house repossession and the strains put on relationships by employment and financial problems, cuts in welfare spending and health care budget [39]. Also, studies have demonstrated the relationship of higher poverty rates with increased suicide rates [40].

Last but not least, the seasonal change is another risk factor reported by the suicide researchers. Since the 19th century there were uniformly higher suicide frequencies in spring and early summer than in autumn and winter. Nevertheless, recent research has shown that in Western countries the seasonality of suicide tends to diminish [41].

The purpose of this research was to establish the socio-demographic and economic characteristics of patients with psychiatric pathology and suicidal behavior, found in evidence of Titan “Dr. Constantin Gorgos” Psychiatric Hospital, Bucharest.
difference (p=0.49). Table 3 contains details on clinical characteristics of patients.

The most used method of suicide attempt among women was the overdose drug ingestion (benzodiazepines, barbiturate, nonsteroidal anti-inflammatory drugs) (51%, p<0.0001). Men have chosen sharp object injury as the first method (32%, p<0.0001) and jumping from heights as the second method (30%).

In relation to the months of the year, a maximum number of suicide attempts has been recorded during April (N=29, 13.8%) and May (N=29, 13.8%), followed by October (N=28, 2%), March (N=25, 11.9%), November (N=24, 11.4%) and a minimum one in June (N=2, 0.5%).

The results showed two peaks, one in spring and the other in summer-autumn, more significantly for patients with major depression, bipolar disorder and anxiety-depression syndrome (p =0.005). There were no differences in gender (p=0.18). Figure 1 shows details on the seasonality observed.

Analyzing data by cross-tabulation we also observed the following statistical associations: the most used method of suicide attempt among patients who live with family (with partner/spouse and children) was the overdose drug ingestion (p<0.0001), the majority of the unemployed patients were diagnosed with bipolar disorder, major depression and anxiety-depression syndrome (p=0.01).

CONCLUSIONS

After analyzing our batch of patients, certain features were highlighted and need to be mentioned: the majority of them are men, more than half of total have an alcohol addiction, are unemployed, and have financial problems. The main psychiatric disorders which correlated with patient economic problems are major depression, bipolar disorder and anxious-depressive syndrome. Most suicide attempters were mature adults (45-54 years), followed by young adults (20-24 years). As a method of suicide, women choose mainly drug overdose ingestion, while men sharp object injury. It was also observed a seasonality of the suicide attempts (the results showed two peaks, one in spring and the other in summer-autumn), probably because the influence of psychiatric pathology over the seasonal mood.

We are aware on the limitations of our study regarding the data of recorded patients and that larger groups and comprehensive data are needed for further recognition of the contextual factors and personality traits of people with suicidal behavior.
References