Aspects of Suicide in Schizophrenia

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Introduction: In the literature, autolytic risk in patients with schizophrenia was estimated at 10–40%, and up to 50% in studies that also refer to patients with schizoaffective disorders.
Purpose: To find the risk factors of suicide in this specific group of patients with schizophrenia who comitted suicide.
Material and methods: A retrospective study made on 53 patients with typical history of schizophrenia, who committed suicide in the 2000–2009 period.
Results and discussions: Of the 794 investigated suicide cases, 53 were patients with schizophrenia (6.7%), 54.7% were between 15–30 years and 66% were male. Marital status seems to play a major role in suicide genesis, 72.7% of the subjects being either unmarried, divorced, separated or widowed. Alcohol consumption was present in 26.1% of cases and smoking in 32.2% of cases.
Conclusions: Although the number of studied cases is too small to draw relevant conclusions, our study indicates that male gender, young age, unmarried status and rural origin act as risk factors for committing suicide.

Keywords: suicide, parasuicide, schizophrenia

Introduction

In the literature, autolytic risk in patients with schizophrenia was estimated at 10–40%, and up to 50% in studies that refer to patients with schizoaffective disorders. Kaplan, 1994 [1] stated that approximately 50% of the patients suffering from schizophrenia have autolytic attempts, the percentage of succcesful suicide attempts being 10–15%. Among the contributing factors may be noted: male gender, younger age, higher education, disease awareness, autolytic attempts at onset of the disease, the period immediately after returning from a relapse and loneliness.

Purpose

To find the risk factors of suicide in this specific group of patients with schizophrenia, who comitted suicide.

Material and methods

This is a retrospective study made on 53 patients with typical history of schizophrenia, who committed suicide in the 2000–2009 period.

The methodology used was a comprehensive epidemiological observational study, descriptive to the extent that it follows the suicide rate in the proposed study territory and for the reference population chosen, analytical to the extent that it attempts to capture the role of suicide risk factors. In the studied cases we searched for possible factors which were correlated with the suicide (demographic criteria) the environment of origin, age, schooling, professional status, and clinical data. Statistical analysis was performed using the GraphPad software. Also, the results were used in relation to recent information from literature.

Results

The selection of patients with schizophrenia from a total of 794 autolytic victims with other types of depressive symptoms was done according to DSM IV-TR criteria for schizophrenia. Of the 794 suicide cases, 53 were patients with schizophrenia, representing a 6.7% share.

The first criteria we investigated was the age when the suicide was committed: we noted that 29 patients (54.7%) were between 15–30 years, 13 (24.5%) between 31–50 years and the remaining 11 (20.8%) over 50 years (Figure 1).

Of the 53 patients 35 (66%) were male and 18 (34%) female ($p = 0.017$).

Another investigated factor was the environment of origin of the persons who committed suicide. A higher percentage of patients – 32 (60.34%) came from rural areas and 21 (39.62%) from urban areas ($p = 0.0516$).

Figure 2 shows the effect of marital status on the distribution of suicide cases. The highest number of suicides were encountered among the unmarried, divorced, separated and widowed, with 38 cases (72.7%). There were 3 widowers, one woman and two men. Cohabitation was present in 8 cases (15.1%).

As far as alcohol consumption and cigarette smoking is concerned, we found that 26.1% of the studied persons used alcohol in a more or less excessive manner, while smoking was present in 32.2% of subjects.

Discussions

Analyzing the patients' socio-demographic parameters, we found that the number of patients with schizophrenia who committed suicide was too small to draw valid conclusions, however, the data we obtained will be confronted with other authors' papers [1,2,3,4].

Young age proved to be a risk factor for suicide in patients with schizophrenia, as demonstrated in other specialized studies [7,9,10].

Data from the literature indicate a slight increase in suicide rates in both sexes. In most countries this increase is

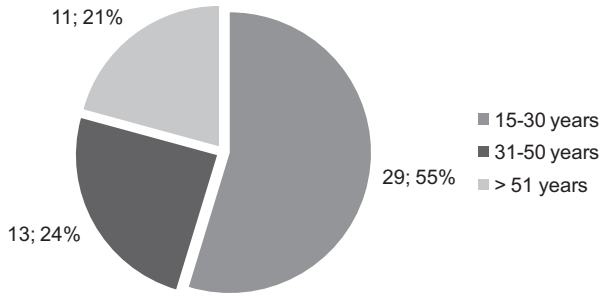

Fig. 1. Graphic representation of the age of the persons who committed suicide

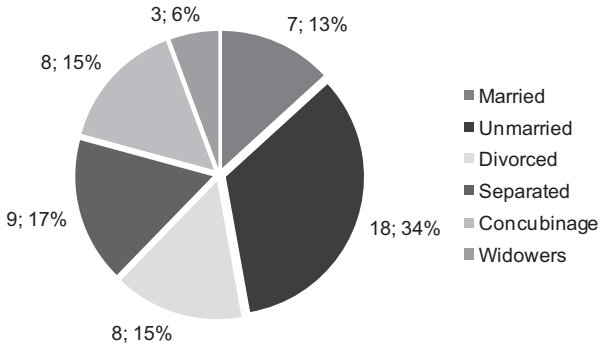

Fig. 2. Distribution of marital status in absolute value and percentage

made in connection with a series of environmental factors, changing age structures, relationships and family stability and other stressful life events. In fact, most authors show that 70% of the total of patients with schizophrenia who committed suicide are men and 30% are women, similar with our results. The higher incidence of suicide among men is explained by some authors with particular biological structures from the repertoire of sexual behavior, by analogy with male straight-aggressivity reflected in higher rates of male crime. In reality, this effect can be explained by biological characteristics, because the suicide report between the sexes differs a lot from one period to another and from one geographical location (country) to another.

Compared with the work of other authors we found that in most cases the differences between the two areas (urban and rural) on the proportion of suicides does not always have great significance. Similar data were revealed by Grecu (2000), and Borges et al. (2008) [4,6] who found that 35% of suicide deaths come from urban areas and 65% from rural areas, while 18.8% have been workers and 17% were retired persons. Other authors [9] indicate a higher incidence of suicide in rural areas, a phenomenon that we have also met. Salley (2008) [5] showed that in civilized countries the difference between urban and rural areas dissipates very much and the rural-urban suicide ratio is gradually reduced. A significant difference between rural and urban areas with a ratio of 2:1 can be explained primarily by the fact that people from rural areas do not benefit from a mental health care system equivalent to that of the urban areas and as a result they rarely appeal to health services and even if they do, only in severe cases.

As far as marital status is concerned, given the high number of unmarried persons among those who committed suicide, it may be assumed that family itself could be a profilactic factor for suicide [4,8].

The role of divorce is quite complex in suicide genesis. On one hand, divorce can be caused by conflicting intrafamilial relationships, alcohol abuse, infidelity, aggression, on the other hand, suicide may occur as a dysthymic reaction or revenge.

The three widowers indicate a complex familial status, because the frequent association with other adverse factors (social isolation, loneliness, retirement, deterioration of psycho-physical health, emerging of feelings of worthlessness, decreased financial resources) means a high suicide risk, especially in men in the third stage of life. Cohabitation was present in 8 cases (15.1%). Of course, these relations dealing only with the present, having uncertain future projections, as well as other, more or less negative aspects, are important elements in the suicide genesis cohabitation unions.

If we extrapolate our data to the general population, we can assume that a harmonious intrafamilial relationship may be able to prevent suicide.

The use of alcohol cannot be avoided, in many cases alcohol being used to find the courage needed to commit the autolytic act. Alcohol and nicotine abuse both had a negative influence on the psychopathology of suicidal risk.

Conclusions

Compared with data from the literature, the number of persons committing suicide in the studied population was small. However, it seems that male gender, young age, unmarried status and rural areas act as risk factors for committing suicide, consistent with data from the literature.

The risk of suicide is very high in patients with schizophrenia with a long evolution and no social support, and it may be said that there are no psychiatric assistance institutions which could completely prevent patients from committing suicide.

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