# Diagnoses of *Suicidum* and *Tentamen Suicidi* in The Registers of Patients of The Kingdom of Yugoslavia's Banovina Public General Hospital in Bjelovar from 1931–1940

Duška Šklebar<sup>1</sup>, Dragica Vrabec-Matković<sup>2</sup>, Marija Čatipović<sup>3</sup> and Ivan Šklebar<sup>4,5</sup>

- $^{2}$ Varaždinske Toplice Special Medical Rehabilitation Hospital, Varaždinske Toplice, Croatia
- <sup>3</sup> Marija Čatipović Children Outpatient Clinic, Bjelovar, Croatia
- <sup>4</sup> University of Zagreb, »Sveti Duh« University Hospital Center, Department of Anesthesiology, Resuscitation and Intensive Care, Zagreb, Croatia
- <sup>5</sup> Technical College Bjelovar, Study of Nursing, Bjelovar, Croatia

## ABSTRACT

Suicide has been a subject of research of philosophy, ethics, religion and medicine for centuries. Attitudes towards it changed during the history, from condemnation of suicide as an unethical act to the theory of suicide as the utmost expression of a human as an individual. Croatia, with the annual suicide rate above 20 percent belongs to the high-risk countries. Suicide frequency varies from region to region, while the suicide rates for the County Bjelovarsko-bilogorska have been well above Croatia's average for decades. The aim of this retrospective study was to establish some epidemiological features of hospital patients with the diagnoses of »suicidum« and »tentamen suicidi« on the basis of records available in the registers of patients of General Hospital in Bjelovar in the period between 1931 and 1940. In the observed period, thirty-three people were treated in hospital for suicide attempt, seven of them dying. An equal number of men and women attempted suicide (13:13), while in the group of those who died, the ratio was more in favour of women (4:3). Suicide incidence was highest in November, followed by May and June, with the most common method for suicide being acetic acid.

Key words: suicide, suicide attempt, epidemiology, history, Bjelovar, Croatia

# Introduction

Today a number of researchers explain suicide as a genetically determined process<sup>1-4</sup>, the others point at the connection between suicidal behaviour and childhood trauma, or stress in general<sup>5,6</sup>, while suicide can also be understood as a philosophical question<sup>7,8</sup>, a sociological phenomenon<sup>9,10</sup>, as well as an analytical or existentialist dilemma<sup>11,12</sup>.

Attitudes and opinions regarding suicide have never been undivided, not even in the ancient world. Plato generally condemns suicide (although he recognizes and states exceptions to the rule), Virgil thinks that suicides are destined to go to Hell. Contrary to this opinion, Seneca considers it every person's right to choose the time and manner of death. Early Christians paid more attention to the eternal life and the life in this world was not in the focus of their attention. In the Old and New Testaments there is no condemnation of suicide. Only in St. Augustine's work »De Civitate Dei« do we come across a harsh denunciation of suicide. The attitude of the Church influenced the social life and legislation, so that in 1788, Joseph II, Maria Theresa's son, issued an edict according to which the body of a suicide was to be buried outside the cemetery. Until 1961, suicide was considered a criminal offence in the UK (which in consequence implied responsibility of the person surviving a suicide attempt)<sup>13</sup>. Today, psychiatry rejects the definition of a suicide at

<sup>&</sup>lt;sup>1</sup> Bjelovar General Hospital, Department of Neurology, Bjelovar, Croatia

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tempt exclusively as an act of unsuccessful suicide. Apart from the obvious difference in outcome of these acts, the stress is on the psychological and epidemiological differences of people who show such behaviour. These acts are similar in form, but in function they can be considerably different. The complexity of the problem is confirmed by the fact that this topic has not been adequately analysed even in the diagnostic hand-books International Clasification of Diseases (ICD 10, MKB 10) and Diagnostic and Statistical Manual of Mental Disorders IV (DSM IV), which are currently in use<sup>14,15</sup>.

A significant presentation of the attitudes and perceptions of the time relevant for this retrospective study was given in a monograph entitled »Suicide«, written by one of the founders of suicidology in this part of the world. Prof. Dr. Milovan Milovanović, and published by science-oriented publishing house »Scientia« in Belgrade in 1929. His definition of suicide is the following: »Suicide should exclusively be understood as conscious and intentional destruction of one's own life. On the contrary, every deliberate act which had one's own death as a consequence, but which was not wished for or could not be intended, should be considered as an accident or accidental death«. Suicide attempt is defined as »a deliberate act with the aim of intentional destruction of one's own life which resulted only in destruction of one's health«<sup>16</sup>. This book shows the prevailing views in the medical and legal circles of that time.

#### **Material and Methods**

With the aim of determining certain epidemiological features of hospital inpatients diagnosed with *suicidum* and *tentamen suicidi*, we investigated available data from registers from the 1930s<sup>17,18</sup>.

The study was conducted via the method of the retrospective inspection of the registers of patients in the Kingdom of Yugoslavia's Banovina Public General Hospital in Bjelovar. 26,104 individual admissions with an even greater number of diagnoses in the period between 1<sup>st</sup> April 1931 and 31<sup>st</sup> December 1936, and between 1<sup>st</sup> January 1939 and 31<sup>st</sup> December 1940 were inspected (with the remark that the registers of patients from the years 1937 and 1938 were not available and are probably lost forever). The results are described qualitatively with elementary statistics.

### Results

In 1931, there was a record of two patients treated for suicide attempt which ended in death. In May, a 21-yearold maid-servant was admitted to hospital and died on the same day of intoxication with an unspecified substance, while in August, a 47-year-old shoemaker died of poisoning with acetic acid. In 1932, there were no records of hospital treatment for attempted suicide which resulted in death. In November 1933, a 31-year-old housewife was admitted to hospital for treatment and died on the same day of morphine poisoning. In November 1934, a 21-year-old day labourer died four days after taking acetic acid. In May 1935, a 21-year-old housewife died fifteen days after poisoning with acetic acid. In July, a 35-year old maid-servant died two days after taking alkali. In 1936, there were no records of hospital treatment for suicide attempt which ended in death. The data for 1937 and 1938 are unavailable. In 1939, a 46-year-old ploughman died on the same day in March when he was admitted after taking concentrated acetic acid. In 1940, there were no records of hospital treatment for attempted suicide which resulted in death.

In 1931, there were records of three patients being treated for suicide attempt which did not result in death. In July, a 21-year-old waitress was treated for six days for intoxication with acetic acid, and released as cured. In September, a 30-year-old house-painter's assistant was treated for six days after taking acetic acid, and was released in an improved state. In November, a 21-year-old woman labourer was treated for three days for suicide attempt using an unidentified method or means. She was released as cured. In the year 1932, five patients were recorded as being treated for suicide attempt using acetic acid. In April, after five days of hospitalization, a 20--year-old maid-servant was released in an improved state, just like a 23-year-old police officer after a three-day treatment. In late June and early July, a 25-year-old day labourer was cured after sixteen days, a 19-year-old maid-servant after twenty-seven days in November, and a 31-year-old man after four days, also in November. In 1933, four people tried to commit a suicide using acetic acid. A 31-year-old housewife was cured after twelve days spent in hospital in May, a 20-year-old prostitute was released after four days in September, a 78-year beggar was released after twenty-four days in September, while the state of a 48-year-old peasant improved after seventeen days in December. In 1934, seven people were treated for suicide attempt. In April, a 49-year-old housewife was treated for twenty-one days after taking acetic acid, and was released as cured. In June, a 21-year old housewife was treated for six days for taking acetic acid, while a 25-year old Gypsy woman spent five days in hospital most probably for taking strychnine (the diagnose is barely legible), and was released in an improved state. On the same day, a 18-year-old Gypsy was admitted to hospital for taking an unknown substance. He was released three days later in an improved state. The same 18-year-old Gypsy, M.D., was admitted to hospital five days later for arsenic poisoning. His state improved and he was released three days later. A 24-year-old peasant woman was treated for ten days in July for suicide attempt by hanging, and was released in an improved state, as well as a 20-year-old maid-servant, who was treated for twelve days in August for taking hydrochloric acid. In 1935, two suicide attempts were registered. A 43-year-old painter was treated for five days in October for intoxication with acetic acid. He was released in an improved state. a 61-year-old switchman drank some alkali, and was treated for eleven days in July. He was released as cured. In 1936, there were no records of treatment for suicide attempt, and the data for 1937 and 1938 are not available. In April 1939, a 27-year-old guard was treated for thirteen days for poisoning with hydrochloric acid, and was released in an improved state. A 21-year old police officer was treated for sixteen days in May for suicide attempt, but there is no record of any substance or method. He suffered from concussion of the brain and head contusion, so the cause was possibly a jump from a height. In May 1939, a 23-year-old peasant woman was released from hospital fourteen days after poisoning with acetic acid in an improved state. A 39-year-old custodian attempted suicide by poisoning with carbolic acid in November, and was released four days later as cured. In June 1940, a 31-year-old woman labourer attempted suicide by drinking acetic acid. She was released in an improved state after three days of treatment.

## Discussion

In the observed period, thirty-three patients were treated in the Kingdom of Yugoslavia's Banovina Public General Hospital in Bjelovar for suicide attempt, seven of whom died (Table 1). A small size of the sample does not allow a more serious statistical analysis, but this can certainly be indicative. An equal number of men and women attempted suicide (13:13), while in the group of those whose attempt resulted in death, the number of women is slightly larger (4:3). Regarding the months of the year, the incidence of suicide attempts was the highest is November, followed by May and June, and April and July. As far as the age is concerned, younger population dominates. The average age of people who committed suicide is 31.5, and among the attempters it is 29.9 (there is only one exception, a 78-year-old beggar). According to occupation, there are mainly people belonging to lower classes (day labourers, ploughmen, maid-servants, housewives, a »harlot«...) In the box reserved for occupation we may come across entries such as »Gypsy«, »Russian« or »Circassian«, which, according to the modern understanding, cannot be considered as occupation, but at the time in question it was probably used as a kind of (mistaken) stereotype designation. Amongst other information, the register books contain details regarding each person's religion, so officially, according to this, there

 TABLE 1

 KEY DATA ABOUT PATIENTS TREATED IN BJELOVAR GENERAL HOSPITAL WITH DIAGNOSIS OF SUICIDE AND SUICIDE ATTEMPT

Year	Sex	Age	Occupation	Method	Outcome
	F	21	Maid-servant	Unspecified	Death
	$\mathbf{F}$	21	Waitress	Acetic acid	Cured
1931.	Μ	47	Shoemaker	Acetic acid	Death
	Μ	30	House painter ass.	Acetic acid	Improved
	F	21	Labourer	Unspecified	Cured
1932.	F	20	Maid-servant	Acetic acid	Improved
	Μ	23	Police officer	Acetic acid	Improved
	Μ	25	Labourer	Acetic acid	Cured
	F	19	Maid-servant	Acetic acid	Cured
	Μ	31	Unknown	Acetic acid	Cured
1933.	F	31	Housewife	Acetic acid	Cured
	$\mathbf{F}$	20	Prostitute	Acetic acid	Improved
	Μ	78	Beggar	Acetic acid	Impreied
	F	31	Housewife	Morphine	Death
	Μ	48	Peasant	Acetic acid	Improved
1934.	F	49	Housewife	Acetic acid	Cured
	F	21	Housewife	Acetic acid	Improved
	F	25	Gypsy	Strychnine	Improved
	Μ	18	Gypsy	Unspecified	Improved
	Μ	18	Gypsy	Arsenic	Improved
	F	24	Peasant	Hanging	Improved
	F	20	Maid- servant	Hydrochloric acid	Improved
	Μ	21	Labourer	Acetic acid	Death
1935	F	21	Housewife	Acetic acid	Death
	F	35	Maid-servant	Alkali	Death
	$\mathbf{M}$	61	Painter	Acetic acid	Improved
	Μ	43	Switchman	Alkali	Cured
1939.	Μ	46	PIoughman	Acetic acid	Death
	$\mathbf{M}$	27	Guard	Hydrochloric add	Improved
	$\mathbf{M}$	21	Police officer	Unspecified	Improved
	$\mathbf{F}$	23	Peasant	Acetic acid	Improved
	Μ	39	Custodian	Carbolic acid	Cured
1940.	F	31	Labourer	Acetic acid	lmproved

were no atheists. Every registered patient belonged to one of the Christian denominations (Catholic, Eastern Orthodox, Protestant) or another religion (Moslem, Jew). Suicide is frequently mentioned in the Bible, but without moral judgement. However, according to the cannon law, a suicide has no right to a Catholic funeral. The most popular method of suicide, and probably the most available, was acetic acid (Figure 1). It was used in 16 cases of suicide attempt and 4 suicides. Strychnine, arsenic, alkali and carbolic acid were used in individual cases of suicide attempts, while hydrochloric acid was used in two attempts. Morphine was used as a method for one suicide. One case of attempted hanging was registered. For one suicide and three suicide attempts there are no records of substance of intoxication or a method. As in one case of suicide attempt injuries were recorded a concussion of the brain and head contusion, the method could have been a jump from a height. Relatively low frequency of hanging as method of suicide was recorded. For the reason of high mortality and technical simplicity of performance, it is possible that the people who committed suicide in such way were beyond reach of the documentation this research was based on, since the dead did not use to be brought to General Hospital. It is obvious that the availability and reliability of certain method determined its preference in selection of a method of suicide.

Fig. 1. A detail from the register of patients.

From the release diagnoses and the length of hospitalization, it is visible that the patients were mostly treated for somatic damage caused by the suicide attempt, and not for the suicidal behaviour itself. All the survivors were released in an improved state or cured. The diagnosis of suicide was not accompanied by other psychiatric diagnoses, which indicated insufficiently elaborated diagnostic principles characteristic for that time. Today, we follow defined diagnostic criteria ICD 10 and DSM IV while making a psychiatric diagnosis and differential diagnostic assessment. The diagnostic and statistical hand--book for mental disorders bases diagnostic evaluation on five so called diagnostic axes. By applying such multi--axis system, we not only define the current clinical disorder, but also the personality structure, mental status, general state of health, psycho-social conditions and possible problems arising from the physical environment, as well as give a general assessment of the patient's functioning.

On the other hand, this is in complete conformity with the definition we find in Milovanović's book, which defines suicide as a conscious act with conscious motiva-

tion, although he had already, almost three decades before Stengel<sup>19,20</sup>, discovered and described unconscious motivation for a suicide attempt crowned with the phrase: »...raising an alarm, drawing attention to oneself, a warning of danger, a cry for help«. Namely, in the first text-books on psychiatry (Esquirol, 1838, and others) suicide was categorically treated as a symptom of a mental disorder, even as an illness sui generis. The old definitions of suicide as a conscious and intentional destruction of one's life lost their accuracy with the discovery of the unconscious, which points to a number of unconscious motives and the ways in which the instinct of destruction works. The appearance of psychoanalysis brought about new ideas and psychological and psychosociological viewpoints were brought into the limelight<sup>21</sup>. In his book, Milovanović himself advocated a combination of physical and mental autopsy in interpretation of the genesis of suicidality, and pointed out that no research nor statistics of suicides is complete without pathological findings. Following this line of reasoning, in 1936, Neuropathological Laboratory was founded at the Mental Institution in Stenjevec (today's Clinical Hospital Vrapče). In the documents we analysed, there were no references to possible autopsies, i.e. pathoanatomical findings for people who committed suicide. It is also unknown what happened to the people who attempted suicide. There is only one record of a patient who was admitted to hospital twice in the period of five days for suicide attempt. His behaviour was not marked by any other diagnosis, which is in accordance with the widely held view of that time that a suicide attempt is simply an unsuccessful suicide<sup>16</sup>. Regarding the patients' addresses, there was noticeable migration of the population fit for work, who moved in search of a job, with a lot of patients treated in Bjelovar Hospital at that time coming from Medimurje, as well as from other parts of the then Kingdom of Yugoslavia.

When we look at this problem area in retrospection, we are forced to drift in the wide range from Stengel's »appeal«, Milovanović's »alarm«, Menninger's »chronic suicide«, Feuerlein's »parasuicidal intermission«, all the way to the final act of committing a suicide. The problem of defining has not lost any of its importance in the past decades. Although every lay person understands the meaning of the word suicide (Lat. sui = oneself, ocidere = kill), and there is a wide range of definitions in an attempt to objectify this deeply intrapsychic and completely individual experience, but we could raise an objection, more or less justified, to each of them. For that reason, for the purpose of practical work, we resort to the analysis of the interrelationship between the disposition, cause, motive and inducement. By disposition we understand a permanent set of circumstances that make an individual a potential candidate for suicide, by cause, more or less objective exogenic, but also unfavourable endogenic factors, by motive we mean the inner subjective impuls which initiates a suicidal act, and by inducement we understand the direct exogenic causative agent of a suicidal act.

# Conclusion

In the observed time period, almost the same as today, in spite of a number of different approaches and interpretations, suicide remains a specifically human phe-

#### REFERENCES

1. ARANGO V. HUANG YY. UNDERWOOD MD. MANN JJ. J Psychiatr Res, 37 (2003) 375. DOI: 10.1016/S0022-3956(03)00048-7. — 2. SUDA A, KAWANISHI C, KISHIDA I, SATO R, YAMADA T, NAKAGA-WA M, HASEGAWA H, KATO D, FURUNO T, HIRAYASU Y, Neuropsychobiology, 59 (2009) 130. DOI: 10.1159/000213566. - 3. MOLNAR S, MIHANOVIC M, GRAH M, KEZIC S, FILAKOVIC P, DEGMECIC D, Coll Antropol, 34 (2010) 1427. - 4. GRAH M, MIHANOVIC M, SVRDLIN P, PISK SV, RESTEK PETROVIC B, Coll Antropol, 34(2010) 1433. — 5. ANISMAN H, DU L, PALKOVITS M, FALUDI G, KOVACS GG, SZON-TAGH-KISHAZI P, MERALI Z, POULTER MO, J Psychiatry Neurosci, 33 (2008) 131. - 6. VIDETIC A, ZUPANC T, PREGELJ P, BALAZIC J, TO-MORI M, KOMEL R, Eur Arch Psychiatry Clin Neurosci, 259 (2009) 234. DOI: 10.1007/s00406-008-0861-4. - 7. CAMUS A, Mit o Sizifu (Svjetlost, Sarajevo, 1987). — 8. HOWE EG. J Clin Ethics, 20 (2009) 115. — 9. FROMM E (Naprijed, Zagreb, 1986). - 10. CONWELL Y, Am J Psychiatry, 166 (2009) 845. DOI: 10.1176/appi.ajp.2009.09060780. - 11. FRANKL V, Nečujni vapaj za smislom (Naprijed, Zagreb, 1987). - 12. nomenon, a deeply intrapsychic and individual process, which cannot be completely covered by any definition or scientific interpretation. Or, as it was written as early as 1929, it still remains »the greatest mystery of all«.

NAD S. MARCINKO D. VUKSAN-AEUSA B. JAKOVLJEVIC M. JAKOV-LJEVIC G, J Nerv Ment Dis, 196 (2008) 79. DOI: 10.1097/NMD.0b013 e31815faa5f. — 13. MILČINSKI L, Suicidalnost. In: KECMANOVIĆ D (Ed) Psihijatrija (Medicinska knjiga, Zagreb-Beograd, 1989). — 14. HZJZ. Međunarodna klasifikacija bolesti i srodnih zdravstvenih problema MKB-10. deseta revizija. (Medicinska knjiga, Zagreb 1994). - 15. DSM-IV Dijagnostički statistički priručnik za duševne poremećaje međunarodna verzija s MKB-10 šiframa. četvrto izdanje (Naklada Slap, Jastrebarsko, 1996). - 16. MILOVANOVIC M, Samoubistvo (Scientia, Beograd, 1929). - 17. Matične knjige prijema Opće bolnice Bjelovar od 1.4.1931. do 31.12.1936. Državni arhiv Bjelovar. - 18. Matične knjige prijema Opće bolnice Bjelovar od 1.1.1939. do 31.12.1940. Državni arhiv Bjelovar. - 19. STENGEL E, COOK NG. Attempted Suicide (Chapman and Hall, London, 1958). - 20. STENGEL E, The Am J of Psychiat, 118 (1962) 725. – 21. KAPAMADZIJA B, ŠOVLJANSKI M, BIRO M. Osnovi medicinske suicidologije (Medicinska knjiga, Beograd-Zagreb, 1990).

## D. Šklebar

Bjelovar General Hospital, Department of Neurology, Mihanovićeva 8, HR-43000 Bjelovar, Croatia e-mail: dsklebar@gmail.com

### DIJAGNOZE *SUICIDUM* I *TENTAMEN SUICIDI* U MATIČNIM KNJIGAMA BOLESNIKA OPĆE JAVNE BANOVINSKE BOLNICE KRALJEVINE JUGOSLAVIJE U BJELOVARU OD 1931. DO 1940. GODINE

#### SAŽETAK

Samoubojstvo je predmet istraživanja filozofije, etike, religije i medicine stoljećima. Stavovi su se mijenjali tijekom povijesti od osuđivanja samoubojstva kao neetičnog čina do teze o samoubojstvu kao najvišem izrazu slobode čovjeka kao pojedinca. Hrvatska se s godišnjom stopom iznad 20 ubraja u zemlje s visokim rizikom. Učestalost samoubojstava je različita u pojedinim dijelovima države, a županija Bjelovarsko-bilogorska desetljećima ima stopu samoubojstava znatno iznad hrvatskog prosjeka. Ovom retrospektivnom studijom pokušali smo na temelju dostupnih podataka iz Matičnih knjiga bolesnika Opće bolnice Bjelovar od 1931. do 1940. godine utvrditi neke epidemiološke osobitosti hospitalno liječenih bolesnika s dijagnozom »suicidum« i »tentamen suicidi«. U promatranom vremenskom razdoblju trideset i tri osobe liječene su u bolnici radi pokušaja samoubojstva, sedam ih je preminulo. Jednak je broj muškaraca i žena pokušao učiniti samoubojstvo (13:13), a u skupini sa smrtnim ishodom broj žena je bio nešto veći (4:3). Pokušaji su bili najučestaliji u studenom, zatim u svibnju i lipnju, a kao sredstvo izvršenja najčešće je korištena octena kiselina.