E D I T O R I A L

UDC: 616.89-008.441.44-084
DOI: 10.2298/VSP160701216D

World suicide prevention day

Svetski dan prevencije samoubistava

Gordana Dedić

Clinic for Psychiatry, Military Medical Academy, Belgrade, Serbia; Faculty of Medicine of the Military Medical Academy, University of Defence, Belgrade, Serbia

Introduction

The first World Suicide Prevention Day was held in 2003 as an initiative of the International Association for Suicide Prevention (IASP) and the World Health Organization (WHO). Since then, World Suicide Prevention Day has taken place on 10th September each year.

"Connect, communicate, care" is the theme of the 2016 World Suicide Prevention Day. Fostering connections with those who have lost a loved one to suicide or have been suicidal themselves is crucial to furthering suicide prevention efforts. People need to discuss suicide as they would any other public health issue if people are to dispel myths about it and reduce the stigma surrounding it. Clinicians and other service providers need to care enough about people at risk to commit suicide and need to make suicide prevention as their core business. Communities need to care enough about people at risk to commit suicide, and to be able to identify and support those who may be at heightened risk. Most of all, people need to care about themselves [1].

Statistics

The WHO estimates that over 800,000 people die by suicide every year. This roughly corresponds to one death every 40 seconds. Up to 25 times as many again make a suicide attempt. The tragic ripple effect means that there are many more people who have been bereaved by suicide or have been close to someone who has tried to take his or her own life.

In 2012, in the world suicide was the fifth leading cause of death among people between 30 and 49 years of age, and the second one in people between 15 and 29 years of age.

Although traditionally suicide rates is highest among older men, suicide among young people is on the rise and makes the group with the highest risk in developing countries and in the third of the economically developed countries.

According to the WHO in all European countries, suicide is more common among men, while suicide attempts are more frequent among women [1]. These differences can be explained by pronounced impulsiveness in men when they more often choose the more efficient (more lethal) methods of suicide. As well, there is the fact that the significant role in suicidal behavior have a different cultural expectations of men and women, when suicide becomes an option that they think, because when men are in suicidal crisis, they rarely seek help [2].

In 2012, the average suicide rate (number of suicides per 100,000 inhabitants) in the world was 16. The highest suicide rate in the world is in Guyana (44.2), followed by South Korea (28.1) and Sri Lanka (28.8). The lowest suicide rates in the world are in Saudi Arabia, Syria, Kuwait and Lebanon, where the suicide rate is less than 1 *per* 100,000 inhabitants.

The suicide rate in Europe is the highest in Lithuania (28.2) and Kazakhstan (23.8), followed by 10 countries of the former Soviet Republics [1].

Suicide rate in the world for the last 50 years has increased by 60%. Since 1953 a growing trend of suicide rate has also been observed in Serbia. The lowest rates of suicide were registered at the beginning of the 50s of the XX century, about 12 to 100,000 and the maximum in 1992 and 1997 with the rate of 20.9 *per* 100,000. The rate of suicide in Serbia has been decreasing since 2000 [3–5].

According to data obtained from the Statistical Office of the Republic of Serbia (Department for Demography) in a 10-year period, from 2006 to 2015, in Serbia, about 1,200 people committed suicide on the average *per* year. In the observed period, the suicide rate decreased from 19.43 in 2006 to 15.0 in 2015. Men 2.5 to 3.2 times more likely commit suicide than women (Table 1).

Suicide is most often performed by individuals with secondary education, pensioners and married persons. The most common method of suicide among men and women are hanging and drowning, the second most common method in males is by firearm and poisoning with solid or liquid substances in females. In the period 2011–2015, the highest number of suicides was performed by individuals older than

Correspondence to: Gordana Dedić, Clinic for Psychiatry, Military Medical Academy, Crnotravska 17, 11 000 Belgrade, Serbia. E-mail: sdedic@sezampro.rs

Table 1

Annual suicide rate (*per* 100,000) in Serbia within the period 2006–2015

Year of suicide	Total	Males (M)	Females (F)	M/F ratio
2006	19.4	28.3	11.1	2.56
2007	18.3	26.9	10.2	2.63
2008	17.5	25.3	10.2	2.46
2009	18.8	28.1	9.9	2.81
2010	16.6	25.5	8.1	3.14
2011	17.4	25.8	9.3	2.77
2012	17.3	26.6	8.4	3.17
2013	16.7	25.9	8.1	3.20
2014	15.9	24.7	7.6	3.26
2015	15.0	23.0	7.4	3.11

75 years (23.4%), among them 40% suicide committers were people older than 65 years [2].

Analysis of committed suicides in the Serbian Armed Forces within the period 2001–2010 was carried out on the basis of data obtained by psychological suicide autopsy. In the observed period, 61 members committed suicide, that is, 50.82% of the military personnel of the Serbian Armed Forces (11.48% officers, 27.86% of noncommissioned officers, 11.48% of contract soldiers) and 49.18% of soldiers during their military service. The most common motive of suicide in officers is negative life achievement; in contract soldiers and noncommissioned officers problematic relationship with the emotional partner is the most common and in soldiers exhausted adaptational capacity for military service [6–11].

The etiology of suicide

The risk of suicide-related behavior is supposed to be determined by a complex simultaneous interplay of sociocultural factors, psychiatric history, personality traits and genetics as well as neurobiological vulnerability. A recent neurobiological research, particularly studies on families with suicide, as well as studies on twins and adopted children suggest that genetic factors play a significant role in the predisposition to suicidal behavior. Gen-specific suicide has not been found, but research suggests the association between suicide, aggression and impulsiveness. This view is supported by adoption and family studies indicating that suicidal acts have a genetic contribution that is independent of the heritability of Axis I and II psychopathology. The heritability for serious suicide attempts was estimated to be 55%. Further understanding of the genetics and pathophysiology of suicidal behavior is therefore very important [1, 6].

According to sociological theories, suicide is the result of impaired balance and damaged relations between individuals and social institutions (marriage, family, professional organizations, cultural and moral norms) which is supported by the fact that the suicide rate in traditional societies is considerably lower.

In the psychodynamics of suicide, currently there are 3 psychoanalytic theories. According to the first theory (Freud), suicide is the result of moving the murderous impulses. A suicidal person wishes death, which was originally targeted towards another person, turned toward oneself. According to the second theory (Karl Meninger) a person who has committed suicide, focuses suicidal intentions on the destruction of life of survivors. According to the third theory (Fenihel) there is a desire for union with the beloved object, often a figure of the mother, in suicides. In this sense we can see a correlation between suicide and the day of the anniversary of the death of a parent or with some other significant dates in the life of suicidal person [6, 12].

Suicide risk factors

Risk groups to carry out suicide are young, persecuted, imprisoned, refugees, migrants, the elderly and seriously ill, depressed and lonely (single and unmarried) people. Very important factors are: addiction to alcohol and drugs, raped and sexually abused in childhood, abused by peers in the adolescent period, mentally ill, persons prone to self-mutilation and suicide attempts, emphasized aggressive and impulsive persons, persons with family, marital or relationship problems, unemployment, rapid depletion and socially miserable, people prone to risk and danger, self-sacrificing, excessive moralists, adventurers tend risks, dangers and challenges. According to religion, suicide is more common among Protestants than among Catholics and Jews, among Christians than among Muslims, as well as in white than in black patients.

An important role is played by identification (identification with a model) and imitation of lifestyle role models and idols, so-called Werther syndrome. It is well-known that many public figures are a copycat model for young people to commit suicide (Marilyn Monroe, Ernest Hemingway, Yesenin, etc.).

The modern form of suicide is a so-called cyber suicide, the term used when the victim publicly, in front of the webcam, attempts or commits suicide. At specialized sites and forums suicidal person speaks about his/her plans for suicide. Also through sites and forums one can get detailed instructions how to commit suicide. There are also internet sites and chat rooms where suicidal people can meet each others and arrange to commit suicide together.

Protective factors against suicide are moral and religious considerations [6].

Most common motives for suicide are separation problems (abandonment by partners), the problem of loneliness in old people, problems with parents in youths. There are also a so-called balance of suicide when a person, faced with illness, difficult living conditions, especially with difficult financial situation, decides to kill him/her self [13, 14].

Presuicidal syndrome

In response to threats from the environment, people in crisis exert psychological, somatic and behavioral symptoms. Depression accompanying feelings of helplessness, and then the feeling of hopelessness, as a prelude to presuicidal syndrome. Overflowing anxiety and depression, people in crisis are hard to bear, and have a desire to ''escape'' from intolerable situation, when in order to reduce tensions begin to think about suicide, evaluate the possibility to choose lethal means which are then taken (tablets, rope, rifle, etc). The ultimate outcome is the suicidal act.

In people with presuicidal syndrome changes in physical appearance and behavior can be observed: neglect of external appearance, changed facial expression (sad), decline in general hygiene, change in dress style, exhaustion, bodily harm (consequences of self-harm), then changed behavior (withdrawal, hypersensitivity, nervousness, fatigue, indecision, apathy or rather agitation and hyperactivity, mood variability, mood inability to relax), loss of interest (interrupting contact with the social environment, lack of participation in joint activities (so-called. "social rituals"), change in habits (excessive cigarette smoking, alcohol consumption – narcotics), loss of interest in sex, hobbies, even in activities that were previously enjoyed, long sleep or insomnia, waking up very early in the morning, have nightmares, night get up, walk around the room, striking change in body weight, lack of appetite and weak or too eating (loss, rarely weight gain, increased abuse of psychoactive substances or alcohol; they finish their affairs, pay debts, say good-bye to their friends and relatives, and give back valuable personal belongings. One must pay attention to the statements made by the suicidal person, their ideas, statements, plans, earlier suicide attempts [6, 12].

Therapy

In accordance with the guidelines of the WHO general practitioners have a significant role in the prevention of suicide and in early detection of the first signs of presuicidal syndrome. Studies show that 60–70% of people who have intention to kill themselves are examined by a general practicaniors one month before they attempted or committed suicide. If life crisis is not recognized, it could be the motive for suicide attempt, and, also, the risk factor for repeated suicide attempts [1].

The application of psychotherapeutic crisis intervention help people to recognize their feelings and thoughts that lead them to crisis, all of which have relevance for the prevention of suicide attempts. People who have come through an episode of extreme suicidal thinking often say that sensitively-managed conversations with others helped them on their course to recovery [12, 15].

Suicide prevention program in Serbia

The fact is, suicide is preventable.

The plan of the WHO in sucide prevention is reduction of suicide rates in the world by 10% till 2020. In this context, there is the planned program of education for the population in order to reduce stigma (labeling) of people asking psychiatrist for help when in crisis and to reduce discrimination against people suffering from psychiatric disorders. The media also have an important role to play in suicide prevention [1].

Suicide prevention program in Serbia should just be focused on the male population that is a more vulnerable population group than the female population. The explanation of this phenomenon can be that women are characterized by some features which contribute to the protection of suicide. These are primarily established mutual relations with other persons, that women feel more willing to freely exchange views, to consult with others when they have problems and to accept help from a friend. Women are more likely to see a doctor in connection with problems related to mental health, easier to verbalize problems and are willing to share their emotional experiences with others, which facilitates detection and treatment of psychiatric disorders when they are in crisis and thus contribute to reducing the risk of suicide.

On the other hand, men in relation to its social role are more exposed to occupational stress, which, along with frequent substance abuse, especially alcohol, are significant risk factors for suicide. Culturally, men highly value independence and determination, and avoid seeking professional help when they find themselves in crisis. So, it is necessary to work on health education in order to improve the motivation of the population, especially the males to seek professional help which would contribute to reduce risks of suicide [2].

R E F E R E N C E S

1. *World Health Organization.* Mental health. Suicide rates. Available from: http://www.who.int/mental_health/prevention/suicide_rates/en/
2. *Dedic G.* Gender differences in suicide in Serbia within the period 2006-2010. Vojnosanit Pregl 2014; 71(3): 265–70.
3. *Penev G, Stanković B.* Suicides in Serbia at the beginning of the 21st century and trends in the past fifty years. Stanovništvo 2007; 45(2): 25−62. (Serbian)
4. *Penev G, Stanković B.* Suicides in Serbia: Vulnerable men. Socijalna misao 2009; 16(4): 151−68. (Serbian)

5. *Selakovic-Bursic S, Haramic E, Leenaars AA.* The Balkan Piedmont: male suicide rates pre-war, wartime, and post-war in Serbia and Montenegro. Arch Suicide Res 2006; 10(3): 225−38. (Serbian)
6. *Dedić G, Panić M.* Suicide in the army. Belgrade: Media Center Defence; 2015. (Serbian)
7. *Dedic G, Panic M.* Risk factors for suicide in military personnal in the Army of Serbia. Vojnosanit Pregl 2010; 67(4): 303–12. (Serbian)
8. *Dedic G, Panic M.* Risk factors for suicide in soldiars of the Army of Serbia. Vojnosanit Pregl 2010; 67(7): 548–57. (Serbian)
9. *Dedić G. Milinković-Fajgelj O, Kolundzić D, Živić B.* Suicide prevention in the military enviorement. Belgrade: Vojnoizdavački zavod; 2003. (Serbian)
10. *Dedic G, Panic M.* Suicide prevention program in the Army of Serbia and Montenegro. Mil Med. 2007; 172(5): 551–5.
11. *Dedic G, Panic M, Djurdjevic S.* Wounds of War – Suicide of war-veterans of wars waged on the territory of former Yugoslavia. In *Wiederhold BK*, editor. Lowering Suicide Risk in Returning Troops. NATO Science for Peace and Security Series, E: Human and Societal Dynamics. Amsterdam, Berlin, Oxford, Tokyo, Washington: IOS Press; 2008. Vol 42, p. 136-148 ISBN 978-1-58603-889-2
12. Dedić G. Suicide, help, hope-psychotherapeutic crisis intervention following suicide attempt. Beograd: Media centar "Odbrana"; 2011. ISBN 978-86-335-0320-4
13. *Dedic G, Djurdjevic S. Golubovic B.* Psychological assessment of persons following suicide attempt by self-poisoning. Vojnosanit Pregl 2010; 67(2):151-8.
14. *Novakovic M, Babic D, Dedić G, Lеposavić Lj, Milovanovic A, Novakovic M.* Euthanasia of patients with the chronic renal failure. Coll. Antropologicum 2009; 33(1): 179–87.
15. *Dedic G.* Model of psychotherapeutic crisis intervention following suicide attempt. Vojnosanit Pregl 2012;69(7):610-5.