Suicide Prevention Program in the Army of Serbia and Montenegro

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Suicide, as one of the greatest problems of maladjustment to the military environment, has been a subject of investigation in the Army of Serbia and Montenegro (former Yugoslav Army) for more than six decades. The Suicide Prevention Program was implemented in December 2003. The aim of the study was to follow-up the application of the Suicide Prevention Program in the Army of Serbia and Montenegro and its effect on the suicide rate and to compare its incidence in civilians. Results of the program application showed that the number of suicides in the Army of Serbia and Montenegro was constantly reducing over the period 2004 to 2005. For soldiers, it was even four times less than in the civilian male population, particularly in the period of adaptation to the military environment. Since the Suicide Prevention Program in the Army of Serbia and Montenegro proved to be successful in decreasing the suicide number, it should be further improved and routinely applied.

Introduction

Although not recognized as a disease, suicide is a tragic outcome of complex etiology and a leading cause of death worldwide. Suicide is the most dramatic maladjustment problem in the military environment as well. Suicide of a soldier is specific, not only by the tragedy of a soldier himself and his family, but also by its great psychological effect upon the social environment and his military unit.

The low rate of suicide makes statistical analysis difficult. Our investigations of the problem of maladjusted behavior during the period of adaptation to the military environment showed that 28.7% of all maladjusted soldiers had suicidal ideas in the first month of military service. This means that although many soldiers have risk factors and suicidal ideas, only a few of them will ever commit suicide. Suicide is supposed to be the end of a long way of personal suffering along which the multiple indicators of vulnerability point out the need for help. This prolonged period of distress is also an opportunity to intervene preventively.

After the war led on the territory of former Yugoslavia from 1991 to 1995, various social and economic changes happened. Yugoslavia was disintegrated into five countries. The Yugoslav People's Army was not only renamed to the Yugoslav Army in 1992, but it also structurally, nationally, and fundamentally changed during the war and the postwar period. The cultural and historic context of those political events gave rise to different ways for many changes in the cultural settings of our country too. The Yugoslav Army changed its name again in 2004 to the Army of Serbia and Montenegro.

According to the National Police Agency statistics for the period 1989 to 2003, the suicide rate in the civilian male population in the Republic of Serbia and Republic of Montenegro, republics of the former Yugoslavia, and later in Serbia and Montenegro was from 19.1 per 100,000 subjects in 1989, to 28.8 per 100,000 in 2002. An evident increase after the NATO bombing in 1999, that is, from 2000 can be observed (Fig. 1).

Until 1998, the military environment of the Yugoslav People's Army was characterized by the mean suicide rate, i.e., approximately 16 suicides per 100,000 of the personnel, the rate similar to military environments in many other countries. However, we still considered it still unacceptably high and our aim was to decrease it even more. Therefore, in December 2003, we started to implement the Suicide Prevention Program in the Army. The program was based on the U.S. Air Force (USAF) strategy which significantly decreased the suicide rate in the period 1994 to 1998 from 16.4 to 9.4 suicides per 100,000 personnel. According to that experience, the estimated rate for 1999 was 2.2 per 100,000 of the personnel. Suicide rates in other military services did not show a sustained decline over the same period. The USAF strategy proved to be effective.

This study is a review of a 2-year follow-up of the Suicide Prevention Program application in the Army of Serbia and Montenegro. Our study provides the descriptive information and the preliminary results after a 2-year period of the Suicide Prevention Program application among the soldiers and professional staff in the Army of Serbia and Montenegro. The aim of our study was to present the effectiveness of the program in reducing the suicidal behavior and to give a good example of a successful preventive approach.

Suicide in the Army of Serbia and Montenegro (former Yugoslav Army)

Suicide has been a subject of investigation in the Army of Serbia and Montenegro (former Yugoslav Army) for the last six decades. The period of the last six decades was divided into three major periods: I, a postwar period until 1998; II, a period from 1999; and III, a period from December 2003.

Period I (1945–1998)

Within the first period from 1945 to 1998, suicide was considered an urgent issue in the military environment and an extreme type of maladjusted behavior of a soldier in the military environment. We emphasize the need for awareness of a full range of risk factors making soldiers more vulnerable to various adverse acts of their behavior or problems, suicide being the most tragic one. Risk factors of suicide—including mental health problems, substance abuse, communication problems, poor coping skills, some financial problems, and social isolation—also confer risk of other adverse outcomes, such as accidental homicide or traffic accidents. In that period, the common interest, both medical and military, was primarily to take effective measures to prevent suicide in the military environment. Unit
commanding officers identified risk of suicide as their highest concern regarding maladjusted behavior problem in their units.

Owing to our experience gained in that period, particularly with regard to different types of soldier maladjusted behavior including suicide, our methodology applied during the recruitment process, and later in the military environment, was changed during the adaptation period. It was observed that suicide prevention began even during the recruitment period with a qualified medical and psychological selection during recruit examination and was continued during the period of adaptation to the military environment. According to the recruitment methodology, only physically and mentally healthy recruits were picked for military duty (military service), while soldiers with serious health problems, especially mental diseases, were eliminated. After joining the military unit, soldiers were submitted to further physical examinations. They were interviewed and psychologically tested to take much closer insight into their actual mental state, and to evaluate their eventual social problems. That examination was performed to identify the soldiers whose physical and mental state might have been changed over the period after recruitment. A team of experts (physicians, psychologists, and commanders) worked to determine eventual problems in incoming soldiers during the period of adaptation to the military service and to take care of soldiers during the whole period of the military service.

Period II (from 1999)

In 1999, the Department for Mental Health in the Military Medical Academy Belgrade began to perform psychological autopsy to collect data on the committed suicides in the Yugoslav Army. Psychological autopsy included professional military staff (officers, professional soldiers, conscripts, civilians, and students of military academies and schools) and regular soldiers in military service. To investigate motives and circumstances of the committed suicides, members of the suicide prevention expert team (a psychiatrist and psychologist), immediately within the first 24 hours after a suicide, went to the military unit where a suicide had been committed. They collected information from the colleagues, commanders, doctors, and the unit psychologist.

They also performed a psychotherapeutic crisis intervention in the unit friends of a self-murdered soldier or professional staff to decrease their emotional tension and to clarify any additional moments which could elucidate the suicide. After that, the psychiatrist and psychologist visited the parents and some family members of the person who had committed suicide and talked to them. Their goal was to support them through empathy and to help them to recognize their feelings of denial, self-doubt, anger, shame, and guilt.

According to the data collected after the suicide: suicide questionnaire, heteroanamnesis data from the colleagues and parents, medical data, psychological data, official data (personality account given by the commander, opinion of the authorized court judges), the psychiatrist and psychologist performed analysis of the suicide and gave a dynamic model of suicidal behavior. Based on all of this information, their further duty was to suggest some preventive measures that could help in the application of the Suicide Prevention Program. Finally, a report had to be sent to the military commands (headquarter).

Period III (from December 2003)

According to experience from the two previous periods, we made a Suicide Prevention Program, which was fully applied in December 2003. The Suicide Prevention Program was based on the studies of both epidemiological and risk factors determined during the psychological autopsy within the period 1999 to 2003. The program also included a comprehensive suicide prevention strategy. A long-term objective of this program was to improve suicide prevention by identifying and modifying military-specific risk factors. The uniqueness of the program was its emphasis on early prevention by reacting to the first signs of dysfunction or distress before the risk of suicide is imminent, as well as enhancing detection and treatment of those in increased danger of committing suicide.

The suicide prevention program was applied in three ways by using: (1) selection (military, medical, and psychological selection procedures to eliminate soldiers and cadets with serious medical, especially mental, problems); (2) education (suicidal risk detection); and (3) motivation (social concern and mental health work with all employees in the Army of Serbia and Montenegro and with some of their family members).

We could say that the Suicide Prevention Program emphasized the importance of the three preventive measures, namely, the rigorous psychological selection of soldiers for a specific military duty, education of officers and soldiers for better recognition and understanding of presuicidal syndrome, and motivation for military duty. Within this program, there were many specific measures for suicide prevention, one of which was prevention of mobile phone usage during guard duty or the rule not to direct to the guard soldiers immediately after return from holidays.

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We would like to stress that one student of a military academy committed suicide in the period 1999 to 2005, which is really a rare case in the civilian adolescent population. The low number of suicides in that period is a result of rigorous screening procedures during selection.

**Suicide Prevention in the Military Environment**

Experience gained from psychological autopsies in the period 1999 to 2003 was incorporated into the book by Dedic et al.\(^\text{16}\) entitled, "Suicide Prevention in the Military Environment," distributed to all military units in the Army of Serbia and Montenegro. The book gives an account of psychological characteristics of suicide in the military environment committed by both soldiers and professional staff. We suggested some suicide prevention measures, the aim of which was to help the professional staff to recognize a person showing the symptoms of an acute crisis and to identify those at suicidal risk, primarily to recognize the signs of the presuicidal syndrome. The preventive activities are based on education of the responsible professional staff and soldiers, while the follow-up procedure includes distribution of the book to professional staff and sets of helpful educational lectures for both professional staff and soldiers. All preventive activities are organized as a series of lectures and materials distributed to all military units.

**Model of Suicide Prevention**

To promote the application of suicide prevention activities, a Model of Suicide Prevention as an educational program was introduced. It was established in the Department for Mental Health of the Military Medical Academy, Belgrade. The model was based on the results of the application of the USAF strategy, which were proved to be very effective. The fundamental goal of this theoretical model of the risk reduction strategy was to reduce the range of risk factors for the military population making it vulnerable and inclined to suicide.

The Model of Suicide Prevention is graphically shown as five concentric circles. There is a soldier/professional staff in the central one, who is at the risk of committing suicide. The remaining four circles represent the strategy for identifying/helping a person at risk of committing suicide (Fig. 3). This comprehensive Model of Suicide Prevention includes activities of primary, secondary, and tertiary mental health prevention teams.

The first level is associated with a target soldier/professional staff friend who has been instructed to recognize the symptoms of presuicidal syndrome. Namely, within their general training, soldiers listen to a few lectures on adaptation, maladjustment problems including suicide, psychoactive substances abuse, etc. In that way, trained and educated soldiers with knowledge about presuicidal syndrome could even cooperate with their commanders and help them in revealing the actual risk for maladjusted behavior including suicide.

The second level consists of the primary mental health team in a military unit: the physician, psychologist, and officer look after soldiers/professional staff from the very first day of joining a military unit. The third level consists of the secondary mental health team situated in the Military Medical Center. It includes the psychiatrist and psychologist who further estimate capabilities of soldiers/professional staff for the military service. The
Effectiveness of the Suicide Prevention Program

Although the Suicide Prevention Program presents information about the effect of program activity, it was difficult to define and obtain it because of cautions related to interpretation and use of measures such as "how many lives were saved." The data of a 2-year follow-up suggested that the Suicide Prevention Program is an efficient program since it resulted in far-reaching mental health effects. We would like to point out that after implementation of the Suicide Prevention Program in December 2003, the total number of suicides in the Army of Serbia and Montenegro committed by soldiers significantly decreased. That significant decrease in the number of suicides committed by the soldiers of the Army of Serbia and Montenegro has been explained by implementation of the Suicide Prevention Program. It was also an indicator of the overall effectiveness of the program.

Figure 2 shows that the total number of suicides significantly decreased from 15 in 2003 to 9 in 2004 and to 7 in 2005. It has to noted that no suicide was committed during the last Christmas holidays in 2005/2006.

Over the period 1999 to 2003, the suicide rate in the Yugoslav Army was approximately 13 per 100,000 subjects. Only 1 year after application of the Suicide Prevention Program, the suicide rate for soldiers significantly decreased to 5 per 100,000 in 2004, which was the lowest suicide rate among soldiers in the postwar period.

Considering the low rate of suicide in the Army of Serbia and Montenegro and relatively low probability that any commander will have a suicide in his unit, this level of concern is worth mentioning. The lower rate of suicide in the military population could be explained by the following factors: screening procedures of the military personnel with the aim of excluding the mentally disturbed and military service provisions for young individuals capable of military service. The decline in suicide rate could also be explained by changes after transformation of the military unit.

Although the role that protective factors might have in preventing suicide—including increasing social support, coping skills, and understanding of mental health and decreasing stigma about the related—is well-known, further care is needed. The significantly lower rate of committed suicides was the consequence of greater knowledge and more adaptive attitudes toward depression and suicide observed among soldiers in the suicidal group. Modest changes in knowledge and attitudes partially explained the beneficial effects of the program. These results suggest a tendency toward a further decrease of the suicidal rate for soldiers and for officers too.

Further Investigation Plans

The ability to recognize presuicidal syndrome early is not only key to military personnel and professionals (physicians and psychologists) for identifying a soldier or a professional staff at risk of committing suicide, but is also helpful for further development of the Suicide Prevention Program. We plan to continue our investigation of suicide risks factors in the next period, from 2006 to 2010. Suggestions for further studies were made to improve the Suicide Prevention Program, to identify eventual new risk factors of suicide in the military environment, and to further apply the intervention program for reducing suicide rates as well.

The specific social status of the military staff in our country is even more emphasized by the fact that the Army of Serbia and Montenegro is going to join the Partnership for Peace. However, we hope to continue further investigation of suicide in the military environment, regarding both soldiers and officers, and to explore new risk factors of suicide as a means of preventing a suicide from being committed. The Suicide Prevention Program should focus on providing more knowledge about depression and detection of presuicidal syndrome and also on making both officers and soldiers aware of their importance in the lives of their friends, their families, or themselves, particularly in times of despair and hopelessness.

We plan to further educate members of the military unit and their families, through delivering lectures, to organize a program for continual education of physicians together with the military units to improve their knowledge about depression and presuicidal syndrome. We also plan to apply an educational program for military psychologists to improve their knowledge about intervention in the crisis. Implementation of the Suicide Prevention Program within the regular curriculum of the Military Academy is planned as well.

Conclusion

The Suicide Prevention Program resulted in a four times lower suicide rate for soldiers in the military environment than in the male civilian population and especially in the smaller number of soldier suicides committed in the adaptation period.

References

Suicide Prevention in the Army of Serbia and Montenegro

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