

Life events as predictors of suicidal behaviour in PTSD patients in Croatia

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Abstract - The aim of the study was to investigate relations between intensity of suicidal attempts and negative life events, characteristic for PTSD patients in the war-affected area in Croatia. Tested hypothesis states that intensity of suicidal behaviour in PTSD patients is higher if patient had more risk life events from different life situations, especially those from the war and post-war period. The hypothesis was tested by empirical research, which included 202 PTSD patients who fulfilled criteria; the most important one was the diagnosis of PTSD. Most of the participants were male (95.5%), dominant age group was between 40 and 60 years. More than three quarter of the participants are married and live with partner and children. Mostly, they have high school education or craft, which is in the accordance with general population in the area of investigation. More than a half of the sample (55.9%) is retired or work as full-time employees. As much as 71.3% stated that have some chronic disease (mostly cardiac diseases of diabetes). The basic information is obtained by self-analysis of the participants. Following instruments were used: questionnaire «Life events», Beck Depression Inventory and A-87, while CAPS and LASC were used as including / excluding tests. The relationship among five groups of life events and suicidal behaviour of subjects was researched and the gained results were processed on evident and latent level. The gained results confirmed hypothesis. The most important life events were those related to parents, partners, siblings and some extra-familial events. The hypothesis is confirmed and results of the research are firm start point for prevention of the suicidal behaviour.

Keywords – life events, PTSD, suicide behavior

I. INTRODUCTION

The area of the Eastern Slavonia and Baranja is plain, Panonian geopolitical region of the Republic of Croatia which is situated between three rivers: Danube at the East (Serbian border), Drava at the Nord (Hungarian border) and Sava at the South (border with Bosnia and Herzegovina).

The history of this region is very long: at the Romanian Time here existed towns Mursa and Cibale which exist until nowadays, After the defeat in Mohach Field in 1526, this region became part of Turkish Empire until 1699 when it became the part of Austro-Hungarian Monarchy. After the WWI it was the part of Yugoslavia until Homeland war for Croatian independence in 1991. Homeland War for the independence lasted the longest in this part of Croatia, from 1991 until 1998 and it was very hard conflict between two nations living there – Croats and Serbs. Lot of people were killed from both sides and lot of soldiers and civilians were injured.

Homeland War resulted with high prevalence of PTSD in the Croatian population, especially in this region. Also in this region suicide prevalence is traditionally high (14.7/100.000).

The main issue of the paper are life events, which are, by definition:

More important events in the life of any person such as death of close relative, marriage, divorce, childbirth (1)

Events in everyday' life of any person which are marked as stressors (2)

Those events which change somebody' life

Medical Dictionary defines life event (3) as “any bigger change in the circumstances person lives in with the influence on interpersonal relations, work, recreational activities and relax”. This source states that life events could be expected and unexpected, which cause stress.

In Sociological Dictionary (4) life event is defined as any important change in demographical, educational, business, health or any other individual circumstances, which happened in certain time. According the source bigger life events are: adolescence, marriage, childbirth, death of close relatives such as spouse, parents, siblings or child, moving to other country or region; serious disease or disturbance in elderly. Dohrenwend (1978) added also some important events related to employment such as getting or losing the job and change of the profession, education in later life while other researchers these events mark as “secondary event”. We can conclude at the end that life events are important changes in personal life, related to change of the roles and adoption of the new activities, which could be related to the changes of attitudes and values of person.

In the research the focus is on suicidal behavior of persons with PTSD so we definitively deal with unpleasant negative life event.

In psychiatric scientific and professional literature unpleasant/negative life events are usually marked as “stressor”. Dohrenwend (5) defined stressors as events strong enough to change usual daily routine for most of the persons. Also, stressors are defined as circumstances or conditions which cause damage of psychological or biological capabilities of person.

For Muraven and Baumeister (6) negative life events have different intensity during the time but always demand psychological adaptation of the person.

War-related events and PTSD (7, 8) by definition bring numerous risk life events for suicidal behavior. Stress war experiences such as death and lose of close persons, availability of the weapon, guilt, differences in the communication with other persons, impoverishment family problems, social problems, nightmares, alcohol abuse, sense of abandonment, etc.

New researches on PTSD underline the importance of personal subjective response on traumatic event, which is more important than seriousness of event itself. This approach is enforced by the fact that most of the people exposed to very heavy trauma do not develop symptoms of PTSD. Nevertheless, people who are survivors of prior traumatic event have more unfavorable consequences. Traumatic events causes fear and loss of the control at most of them while some of them have psychiatric disorders and permanent personality changes. During early development period family history of psychiatric disorders, alcoholism in family anxiety or family psychopathology are specially favorable for development of PTSD. In the later life stages, loneliness, divorced or widowed persons as well as poor ones and without social assistance are in high risk for development of PTSD.

Results of numerous scientific papers confirm close relationship of unfavorable life events and development of PTSD and suicidal behavior.

Breslau and Davis (9) write about significant influence of multiple exposure to combat experiences and existing mental disturbances on development of PTSD among Vietnam veterans. Chemtob (10) with associates describes bad relationships with other people, early separation of parents and family history of anxiety as favorable risk factors for the development of PTSD.

In the epidemiological research of small communities in the North Carolina, Davidson (11) describe development of PTSD in unemployed people and in those with positive family anamnesis of mental disorders.

Solomon (13) studies socio-demographic variables, which influences development PTSD and concludes that marital status plays important role in PTSD development – married persons were more exposed to PTSD.

War experiences represents new life events with cumulative effect for development of post-traumatic psychopathology. Also, life events occurred after the return from the combat have significant influence e.g. social support and gratification have protective effect. PTSD is more frequent in persons with five or more unfavorable life events.

Jukić (12, 14) researched PTSD symptoms among ex-prisoners of war camps during the Homeland war in Croatia immediately after the release and 6 months after. The first results showed that 85,7% of veterans had PTSD symptoms while six months later the number decreased.

II. HYPOTHESIS

The main aim of this research was to explore relations between intensity of suicidal behavior and negative life events among war veterans in Eastern Croatia.

Hypothesis is that intensity of suicidal behavior among PTSD patients in Eastern Croatia is higher if veteran had more negative life events in different life situations, especially during the war and after the war.

The assumption is that suicidal behavior will be more intense if person had more different negative life events.

III. METHOD

3.1 Participants

The research is original scientific work conducted as transversal study. Participants were persons with PTSD diagnosis with and without prior suicidal behavior, in total 202 of them with different gender, age and other socio-demographic characteristics, from Eastern Croatia. The including factors were : status of war veteran, exposure to war trauma, age 30 to 65 and confirmed diagnosis of PTSD.

3.2 Instruments

Life events questionnaire (events with parents, siblings, partners, children and other important events) most of the questions are closed dichotomous with possible answers « yes » or « no »

The information on suicidal behavior was gained through the answer on question: »What is your attitude towards suicide« with proposed answers: I never thought about it; sometimes I thought that it could be solution; I attempted suicide once; I attempted suicide more than once.

LASC (Los Angeles Symptom Checklist)
 CAPS (Clinician –Administered PTSD Scale)
 BDI – Beck’ scale of depression
 Self-rated scale for aggression (A 87)

IV. RESULTS

The results show that more than ¾ of participants (71,79%) had some type of suicidal behavior (Table 1).

Table 1: Attitude towards suicide

	N	%
I never thought about suicide.	57	28.21
I thought sometimes.	112	55.44
I had one suicide attempt.	29	14.36
I had more than one suicide attempt.	4	1.98
TOTAL	202	100

As it was expected, most of the participants sometimes just thought about suicide as the solution of their situation. This basic result is the start point for further analyses in the research.

4.1 Chi-square test

Analysis of the manifest area by chi-square test results with 84 contingency tables. In the relation was between criteria variable about suicide behavior and one of the variables on life events. At statistical significance of 5%, statistical significance had 16 variables.

Statistical significance had: parental alcoholism, poor relationship with parents, long existing quarrels with partner, Sexual problems in marriage, problems with the money, housing problems, witnessing of criminal act or violence, communication problems, longer periods of loneliness, anxiety, alcohol dependence, dependence of different drugs and medications, conviction to the jail and nutrition problems. Most of the problems were from the personal life events, than those with partner and at the end those with parents. Other variables did not have statistical significance. Further results describe intensity and direction of relation among analyzed variable’ pairs. The Cronbach Alpha coefficient is used. The results of this analysis are in the Table 2.

Table 2: Cronbach Alpha coefficient within variables describing life events

Life event group	Cronbachov Alpha	Cronbachov Alpha (standardized)	Number of original variables	Arithmetic Mean	Variance	SD
Parents	,777	,772	22	26,53	12,101	3,479
Siblings	,875	,913	10	10,54	5,354	2,314
Partner	,945	,956	16	17,63	27,654	5,259
Children	,967	,972	9	8,28	11,557	3,400
Else	,778	,770	27	37,00	21,298	4,615

Table 3: Values of discriminative functions

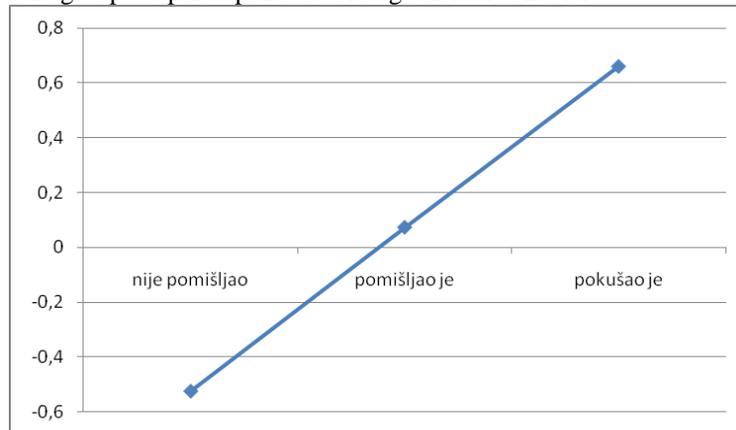
Function	% mutual variance	Canonic co-relation	Wilks' Lambda	Chi-square	df	Sig.
1	95,5	,365	,861	29,571	10	,001
2	4,5	,085	,993	1,414	4	,842

Table 4: Structure of discriminative function

	Standardized coefficient	Matrix
Parents	,008	,237
Siblings	-,259	-,168
Partner	,280	,393
Children	,095	,193
Else	,889	,929

In values presented in tables it is visible that statistical significant differences in attitude towards suicidal behavior is result of life events from the group “other significant events” and group “partners”.

Graph 1: Distribution of the groups of participants according suicidal behavior



From Graph 1 is visible that with higher result on life events scale also raise the possibility of intensity of suicidal behavior (from “I never thought” to “I attempted suicide”). The most important life events for suicidal behavior are other important events.

Table 5: Co-relation and statistical significance of different life events' groups

		Parents	Siblings	Partner	Children	Other important events
Parents	Pearson Correlation	1	,108	,110	-,041	,280**
	Sig. (1-tailed)		,062	,059	,282	,000
	N	202	202	202	202	202
Siblings	Pearson Correlation	,108	1	,259**	,042	-,013
	Sig. (1-tailed)	,062		,000	,277	,429
	N	202	202	202	202	202
Partner	Pearson Correlation	,110	,259**	1	,489**	,195**
	Sig. (1-tailed)	,059	,000		,000	,003
	N	202	202	202	202	202
Children	Pearson Correlation	-,041	,042	,489**	1	-,001
	Sig. (1-tailed)	,282	,277	,000		,494
	N	202	202	202	202	202
Other significant events	Pearson Correlation	,280**	-,013	,195**	-,001	1
	Sig. (1-tailed)	,000	,429	,003	,494	
	N	202	202	202	202	202

In Table 5. results suggest that life events described in the group “parents” are related to those in the group “the other significant events” with statistical significance. The results from the group “siblings” are related to results in the group “partner” and those from group “partner” to those in the group “children”.

These results indicate that intensity of the suicidal behavior of PTSD patients in Eastern Croatia is higher if they have negative life events from at least two groups, “other important persons and events” and “partners”.

V. CONCLUSION

According the results of the research in manifest and in latent area, hypothesis that intensity of suicidal behavior in patients with PTSD is more intensive if patients had more negative life events is confirmed.

Five groups of life events were analysed and three groups confirmed significance, dominant one is group other significant persons and events, among other war events. The results are compliant to those from previous researches

conducted in Croatia and around the world. This could be basis for further researches of different aspects of suicidal behavior in PTSD patients taking in account life events.

Prevention of suicidal behavior in Eastern Croatia should be based on these results and prevention should be directed towards:

Surrounding of the PTSD patients

partners

parents

Analysis of surrounding where patient lives would show wide range of negative social factors and absence of positive factors. The most important are lack of the employment and creative way for leisure time, absence of friends. Most of them are retired despite the fact that they are young for that and social isolation (war veterans usually spend time with each other).

Relationship with partners should be improved and assisted by professionals. The psychosocial work with parents should be directed against socio-pathological behavior of parents such as alcoholism and violence. Prevention is always necessary and it should be implemented on three levels: primary, secondary and third level.

VI. REFERENCES

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