

IMPACT OF SOCIAL SUPPORT ON SEVERITY OF POSTTRAUMATIC STRESS DISORDER

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The last decade of the 20th century, with its well-known events in the former Yugoslavia, resulted in an increased number of cases of posttraumatic stress disorder (PTSD). In our study, we tried to determine whether perceived social support can prevent conditions or reduce the intensity of symptoms of patients. The existence of links between perceived social support and posttraumatic stress disorder imposes the conclusion that the therapeutic intervention in terms of giving support could prevent its occurrence, that is, reduce its duration and intensity. *Acta Medica Medianae 2010; 49(4):31-35.*

Key words: *posttraumatic stress disorder, social support, impact*

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Introduction

The last decade of the 20th century, with its well-known events in the former Yugoslavia, resulted in an increased number of cases of posttraumatic stress disorder (PTSD). This, however, imposed the need for a better understanding of this disorder for the purpose of better treatment and quicker and more successful re-socialization of the patients. The results of the research dealing with this disorder points to the conclusion that it is a complex problem because it is often disguised as other psychiatric and physical syndromes, which makes its treatment and recognition even more complicated(1-4). Also, there is a tendency to develop chronicity which interferes for a long time with the functioning of patient, but also disturbs the lives of those around him. That increases the number of those who suffer from this disorder to the number that is practically impossible to determine (5,6). A number of studies which, inter alia, deal with factors that are important for the expression and severity of PTSD noted the importance of perceived feelings of social support, that is, measurements of the involvement in society and the sense of acceptance that the participants of the war experienced(6-16).

Aim

The aim of our study was to establish the relation between perceived social support and the intensity of post-traumatic stress disorder of the patients of our sample diagnosed with PTSD.

Patients and methods

Our investigation included 94 subjects, the participants of the war in Kosovo, divided into three groups. The first one, including 31 participants, the participants of the war in Kosovo, diagnosed with PTSD after their return from the war operations. The second group were participants of the war with experience of direct combat engagement that contacted us for help because of some kind of psychological endurance, although they were not diagnosed with PTSD. The third group involved the mobilized participants of the war with no experience of direct combat engagement and with no signs of PTSD or other problems that showed up after the comeback from war.

All the participants were male, of Serbian nationality, and never before psychiatrically treated. The instruments that were used were: 1. LOBI – the list of basic biographical information about their age, education, place of residence, marital status. 2. SSI-Social Support Index Scale that measures the perceived sense of social support, degree of integration into the community. 3. PCL for DSM IV - the questionnaire that measures the strength of disorder and the intensity of individual groups of symptoms, including: intrusion, avoidance, hyperarousal. Considering statistical methods,

we used basic descriptive analysis (mean value, standard deviation, coefficient of variation). For determining the statistical significance of differences among the groups, we used the Student t-test and chi square test. The relations between the measuring values were defined by the coefficient of linear regression and the statistical significance of the correlation was defined by using the corresponding t-test.

Results

The mean age of participants of the sample was 35 years. According to the the coefficient of variance which is less than 30 in all groups, we can say that the groups are homogeneous in terms of this variable. Considering the professional status and addresses, no statistically significant difference was found using the chi square test. As for the level of education, a statistically significant difference was found between the first and second group ($p < 0.01$) (Table 1). We found significantly more married / living in the community participants in the control group than in the first and second

groups ($P < 0.05$). The first and second group had more patients who live alone or with their parents, while in the third group almost 90% of the participants lived with family of their own (Table 2).

There is a statistically significant difference between the mean values of total PTSD between the groups, the highest values are in the first, the lowest in the third group. Also, there is a statistically significant difference in the value of certain elements of PTSD (intrusion, avoidance, stimulation), whose values are the highest in the first and recede towards the third one (Table 3). In the case of perception of experienced social support, it was significantly lower in the group suffering from PTSD (first group) compared to the second and the third group where these values were very close (Table 4).

Between the social support index (SSI) and the intensity of post-traumatic stress disorder (PCL) there is a statistically significant negative correlation, in other words better perceived social support correlates with lower intensity of the disorder (Table 5).

Table 1. General demographic indicators of respondents by groups

	Group						Compared groups					
	1. group		1. group		1. group		1. i 2.		1. i 3.		2 i 3.	
							t-test	P	t-test	p	t-test	p
Age												
Mean value	34		34		36		0,208	0,836	1,286	0,203	1,224	0,226
Standard deviation	8		6		7							
No.	31				30							
Coefficient of variation	24		19		20							
Professional status												
							χ^2	P	χ^2	p	χ^2	p
Employee / worker / craftsman	26	84%	24	73%	24	80%	0,602	0,438	0,004	0,952	0,145	0,703
Landowner / businessman	2	6%	2	6%	5	17%						
Unemployed	3	10%	6	18%	1	3%						
Student	0	0%	1	3%	0	0%						
In total	31	100%	33	100%	30	100%						
Education												
primary	0	0%	1	3%	1	3%	5,370	0,007	0,550	0,238	1,660	0,098
secondary	31	100%	25	76%	27	90%						
high	0	0%	7	21%	2	7%						
rest	0	0%	0	0%	0	0%						
In total	31	100%	33	100%	30	100%						

Table 4. Social Support Index (SSI) by groups

	Groups						Compared groups					
	I group		II group		III group		1 i 2 .		1. i 2.		2. i 3.	
							t-test	p	t-test	p	t-test	p
Social Support Index (SSI)												
Mean value	37,55		43,94		44,17		3,109	0,003	3,368	0,001	0,131	0,896
Standard deviation	8,91		7,51		6,14							
No.	31		33		30							
Coefficient of variation	23,73		17,10		13,89							

Table 2. Basic family characteristics of patients by groups

	Group						Compared groups					
	I group		II group		III group		1 i 2 gr.		1.i 3.		2. i 3..	
							χ^2	p	χ^2	p	χ^2	p
Marital status												
married/cohibiting	19	61%	20	61%	26	87%	0,040	0,841	3,857	0,049	4,176	0,041
single	10	32%	11	33%	4	13%						
divorced	2	6%	2	6%	0	0%						
widower	0	0%	0	0%	0	0%						
In total	31	100%	33	100%	30	100%						
Members of the household												
alone	1	3%	2	6%	0	0%	0,272	0,873	8,180	0,017	6,470	0,039
with nuclear family	12	39%	10	30%	3	10%						
with family of his own	11	35%	12	36%	18	60%						
with both his parents` and his own family	7	23%	9	27%	9	30%						
in total	31	100%	33	100%	30	100%						

Table 3. Posttraumatic stress disorder (PTSD) and its elements by groups

	Group						Compared groups					
	I group		II group		III group		1. i 2.		1. i 3.		2. i 3.	
							t-test	p	t-test	p	t-test	p
Sum PTSP												
mean value	52,16		36,91		11,27		4,869	0,000	18,103	0,000	7,765	0,000
standard deviation	8,02		15,61		9,58							
No.	31		33		30							
coefficient of variation	15,38		42,28		85,00							
Intrusion												
mean value	15,77		10,88		2,97		4,109	0,000	16,284	0,000	6,711	0,000
standard deviation	3,20		5,86		2,83							
No.	31		33		30							
coefficient of variation	20,29		53,88		95,54							
Avoidance												
mean value	19,39		13,88		4,73		4,187	0,000	14,280	0,000	6,653	0,000
standard deviation	3,77		6,35		4,24							
No.	31		33		30							
coefficient of variation	19,42		45,74		89,62							
Hyperarousal												
mean value	17,00		12,15		3,57		4,793	0,000	15,170	0,000	7,477	0,000
standard deviation	2,76		4,96		4,06							
No.	31		33		30							
coefficient of variation	16,22		40,79		113,75							

Table 5. The correlation between the index of social support and posttraumatic stress disorder

Correlated parameters	Group		
	1.	2.	3.
SSI i PTSP			
correlation	-0,383	-0,292	-0,539
No.	31	33	30
t-test	2,231	1,703	3,384
Statistical significance	0,033	0,098	0,002

Discussion

The research performed on our sample led to similar results as studies of its kind in the world. By equalization of a group of patients we achieved balance in terms of basic demographic indicators (age, professional status, address).

The participants in the groups were married, which is not surprising given the age, with the remark that there are divorced ones in both the 1st and 2nd groups.

In terms of intensity of total post-traumatic disorder as well as the intensity of his element

groups (intrusion, avoidance, stimulation) there is a statistically significant difference which is expected, given that the existence of a diagnosis of PTSD was the main criteria for forming groups.

The mean value of the perceived social support is lowest in the first group. This is an indication of poor integration into the community, difficult adjustment to peacetime living conditions, alienation, "numbness" of returnees, and changes in personality that are recognized as external, but often contain a critical attitude towards the environment which is related to the disappointment and dissatisfaction with the responses of the environment to them. It is also possible that the community due to some kind of social awkwardness of the returned war-participants and their social skills disturbed by war, truly react badly to them, unable to understand the changed way of their responding and experience of the world. It is certain that there is a strong interaction between a patient with PTSD and his surrounding (family, partners, parents, work, friends) where it is not anymore important what is the cause and what are the consequences, in other words whether the warriors behavior provokes resistance of the environment or the environment is unprepared for the changes in people who have been affected. The fact is that our research as well as the other researches in the world notice the problem of adaptation of the observed patient, instability of emotional response with the oscillations from emotional coldness, almost non-participation to exaggerated responses to small motive, aggression, irritability, alcohol abuse, selfmedication, incompetence of parent and partner roles. In that sense there is a need for a parallel treatment of the nearest of the patient in which they are educated about what characterizes the post-traumatic stress disorder, what changes in the personality and its functioning can be expected and what are the best ways of managing a situation like that. That would definitely help in quicker recovery and resettlement of patients, their reintegration into society and reducing the total damage to their social, emotional, professional performances and further deepening of their conflict with the environment with all the consequences thereby meant (divorce, job loss, incompetent parenting that leads to secondary traumatization of the patients children).

The research of our authors (6) indicates that weak family harmony, poor social support and good marital status are significant predictors of occurrence and intensity of PTSD.

The fact that social support is an important predictor for the occurrence, appearance, intensity and duration of PTSD was the main topic of numerous researches at the territory of our former republics, concluding that there is the necessity of necessity of creation of personal assistance programs (7).

American researchers found that different traumatic experiences can result in the development of PTSD (war involvement, child abuse, abduction, imprisonment, terrorist attack) and that feeling that other people do not understand

him or her, estrange the traumatized person from the environment, creating a feeling of alienation, distrust, loss of connection to the world that is changing outlook on life in general (8). These authors emphasize the irritability of the traumatized, violent reacting to insignificant situations and describe weak social support as a risk factor for the occurrence of dissociative symptoms in this disorder.

Large studies on a sample of veterans from the Vietnam war, indicate that the social support is an important protective factor against PTSD and that veterans with a lower index of social support had more symptoms of disorder, even ten years after combat exposure. (9)

Social support reduces the risk of suicide which is high for all affected, reduces the impulsivity and tendency of anxiety attacks (12).

The feeling of estrangement from the environment is accentuated on non-working days and during holidays, when alcohol abuse as the way of selfmedication is accentuated, which in turn leads to new patient problems (traffic violations, aggressive outbursts, family conflicts). In that sense, there is a strategy proposed for preparing the patient for such days, the number and type of contacts, seeking the support of friends they trust, focusing on spiritual content, redefining the functions of holidays, celebrating holidays in some personal way, authentic versus formal communication (14).

Researches conducted at Mayo Clinic emphasize the need to talk about trauma, to stay in touch with others, to participate in group activities with family and friends, to respect the advice of doctors, to take care of themselves, avoiding selfmedication or the uncontrolled use of drugs and alcohol. They address also to the surrounding of the affected indicating that the person you know might look different than before the trauma, angry and irritated or otherwise withdrawn and depressed. They also say that you should not avoid talking to the affected about the trauma because of your own feeling of hopelessness. It is important, say these researchers, to eat properly, to nourish the body, to exercise, to rest, to foster healthy habits (15).

Conclusion

Our research has shown that perceived social support is a significant predictor of expression and intensity of PTSD. Therefore, it is necessary to establish a broad network of support to the affected from his surrounding. It is necessary to „help the helpers“, introduce patient's family with the essence of the disorder, teach them to recognize its manifestations in behavior and help them find ways to face these events in a quality way that would reduce their family's disfunction and thus the disfunction of the family in whole. Measures like this would then affect on reducing the tendency to develop chronicity and secondary traumatization which represent the forms of complication of this disorder and its adverse outcome.

References

1. Simonović M, Grbeša G. Klinička prezentacija komorbiditeta depresije i posttraumatskog stresnog poremećaja. *Acta facultatis medicae Naissensis* 2007; 24(2):75-81.
2. Wilson D, Barglow P. PTSD has Unreliable Diagnostic Criteria. *Psychiatric Times* 2009; 26(7):145-9.
3. Marshall RD, Turner J. Symptoms patterns with Chronic PTSD in Male Veterans: New finding from the National Vietnam Veterans Readjustment Study. *The Journal of Nervous and Mental Diseases* 2006; 194(4):275-78.
4. Wessa M, Rohleder N. Endocrine and inflammatory alterations in posttraumatic stress disorder. *Exp Rev of Endocrinol and Metabolism* 2007; 2:91-122.
5. Jovanović A. Porodične relacije pacijenata sa posttraumatskim stresnim poremećajem. [doktorska disertacija]. Beograd: Medicinski fakultet; 1995.
6. Milenković T. Psihološke karakteristike učesnika rata obolelih od posttraumatskog stresnog poremećaja. [magistarska teza]. Beograd: Medicinski fakultet; 2003.
7. Klarić M, Frančisković T, Klarić B, Krešić M, Grković J. Social Support and PTSD Symptoms in War-Traumatized Women in Bosnia and Herzegovina. *Psychiatria Danubina* 2008; 20(4):466-73.
8. Taylor S. *Guide Clinicians to PTSD- a cognitive-behavioral approach*. New York (NY): Guilford Press. A Division of Guilford Publications; 2006. Available from: URL: <http://www.Guilford.com>
9. Institute of Medicine of the National Academies (US). *Gulf War and Health. Physiologic, Psychologic and Psychosocial effects of deployment-related stress*. Washington D.C: The National Academies Press; 2008. Available from: URL: www.nap.edu
10. Benotcs EG, Brailey K, Vasterling JJ, Uddo M, Constans JI, Sutker PB. War zone stress personal and environmental resources and PTSD symptoms in Gulf War veterans: A longitudinal perspective. *J of Abnorm Psychol* 2000; 109(2):205-13.
11. Brewin CR, Andrews B, Valentine JD. Meta analysis of risk factors for PTSD in trauma-exposed adults. *J Consult Clin Psychol*. 2000; 68(5):748-66.
12. Kotler M, Iancu I, Efroni R, Amir M. Anger, impulsivity, social support and suicide risk among patients among patients with PTSD. *J Nerv Ment Dis* 2001; 189(3):162-7.
13. Southwick SM, Vythilingam M, Charney DS. The psychobiology of depression and resilience to stress: implications for prevention and treatment. *Annu Rev Clin Psychol*. 2005; 1:255-91.
14. Tull M. Coping with PTSD and Holidays. Medical Review Board (serial online) "cited 2009 December 15". Available from: URL: <http://ptsd.about.com/od/selfhelp/a/Holidays.htm>
15. Mayo clinic staff. PTSD, coping and supporting. Mayo clinic (serial online). "cited 2010 February 10". Available from: URL: <http://www.mayoclinic.com/health/post-traumatic-stress-disorder/DS00246/DSECTION=coping-and-support>
16. Berthold J. Post -War Vets Face New Battle with PTSD. *ACP Internist* 2008. Available from: URL: <http://blog.acpinternist.org/>

UTICAJ SOCIJALNE PODRŠKE NA TEŽINU POSTTRAUMATSKOG STRESNOG POREMEĆAJA

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Poslednja decenija 20. veka, sa poznatim dešavanjima na prostoru bivše SFRJ, imala je za posledicu povećan broj obolelih od posttraumatskog stresnog poremećaja (PTSP). U našem istraživanju pokušali smo da utvrdimo da li opažena socijalna podrška može da spreči obolevanje ili da umanji intenzitet tegoba kod obolelih. Postojanje veze između opažene socijalne podrške i posttraumatskog stresnog poremećaja nameće zaključak da bi terapijska intervencija u smislu davanja podrške sprečila njegovu pojavu, odnosno, smanjila njegovo trajanje i jačinu. *Acta Medica Medianae* 2010;49(4):31-35.

Ključne reči: *posttraumatski stresni poremećaj, socijalna podrška, uticaj*