

# PSYCHOSOCIAL ASSISTANCE PROJECT DECREASED SEVERITY OF POSTTRAUMATIC STRESS DISORDER SYMPTOMS AND DEPRESSIVENESS AMONGST SCHOOL ADOLESCENTS IN POST-WAR BOSNIA HERZEGOVINA

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## INTRODUCTION

The literature indicates that there can be serious and long-lasting psychiatric consequences among children and adolescents after natural and man-made disasters (Goenjian et al. 1997). War-related trauma in children, which may be of diverse origin, cumulates over time and can endanger social, moral, and healthy personality development of the child in many ways (Barath 1996). The 1992-1995 war in Bosnia and Herzegovina (BH) has had a tremendous impact on civilians. In the aftermath of this war, thousands of inhabitants were left with numerous traumatic experiences (Hasanović et al. 2005, Hasanović & Herenda 2008, Goldstein et al. 1997). Amongst the most affected groups were soldiers from the front line, prisoners of war, refugees, and displaced persons (Hasanović et al. 2005). Many children suffered or witnessed horrifying acts of violence and aggression. Young war victims, moved forcibly out of their homes are frequently subjected to multiple traumatic events and severe losses, as well as ongoing stressors within the host country. Although young refugees and displaced persons are often resilient, many experience mental health difficulties, including PTSD, depression, anxiety, and grief (Jensen & Shaw 1993, Hasanović et al. 2006, Ehntholt & Yule 2006, Smith et al. 2002). Additive effects of violence and deprivations during war may overwhelm the coping skills of children and leave them vulnerable to externalizing and internalizing adjustment difficulties and symptoms of PTSD and depression (Hasanović et al. 2006, Allwood, Bell-Dolan & Husain 2002).

The post war situation, regarding child and adolescent mental health care, in BH can be described as follows: 1. lack of appropriate professional institutions, 2. insufficient number of trained professionals, 3. absence of epidemiological record of needs concerning the organization of mental health care for the young population. Although child psychiatry in BH has been established in 1961, it has never developed transversally to be capable to provide institutional cover for the present whole territory of the Bosnia and Herzegovina (Daneš 2005a, 2005b). To assist victims of the war catastrophe in BH together with the existing institutions of medical character, non-government organizations (NGOs) played an important role by systematically developing and conducting a number of projects for psychosocial assistance to the persons in need (Dybdahl 2001).

After the political situation in post-war Bosnia-Herzegovina became more stabilized a two-way direction of return process of BH population to their pre-war places of residence has intensified. Students started to return to their pre-war places in both entities where the school program was designed on predominantly national perspectives. Because of this returnees had a problem in receiving lessons from the programs which did not meet their national needs. Therefore, the project has been modified in accordance to beneficiaries' needs. As late as 2000, the project got new content in order to support an idea of forming a unique school system in Bosnia-Herzegovina, regardless of the ethnicity of the students.

The general aim is to influence the implementation of the unique school system in Bosnia-Herzegovina. Besides this general aim there are three specific aims: 1) reduction of prejudices, acceptance of differences, and reduction of aggressive characteristics among children; 2) linking of children, parents, teachers and school management in both entities, and 3) formation of students' clubs as official organization in schools.

The aim of this study was to estimate whether psychosocial support of the School Project UHD "Prijateljice-Friends" positively affect on reducing of posttraumatic sequel in Bosnia-Herzegovina among school adolescents, after the war period 1992-1995.

## SUBJECTS AND METHODS

### School project

The project: "Supporting returning students to integrate into the school system in post war Bosnia and Herzegovina" had the objective to provide education on the reconciliation of students, parents, teachers and school managers and support to the BH reform in education.

The target groups were students, survivors of war trauma and exile aged 12-15 years, and belonging to three different nationalities (Bosniaks, Serbs and Croats) in primary and secondary schools. The parents of the involved students, teachers and professors of involved students, and school managements of the schools were involved in the project.

The project involved 450 students in ten schools, paired according to the partnership of schools in the Republic of Serbia (RS) and the Federation of Bosnia and Herzegovina (FBH). Every elementary school in FBH has its related partner in RS, including the secondary schools.

The project team included four university educated professionals (one man and three women) in the field of pedagogy, who had regular monthly supervisions with a certified supervisor.

The selection of the primary and secondary schools depended from the concentration of displaced students in the highest number of internally displaced students, who originally belonged to places in RS but had not returned to their native places despite the end of the war. On the other hand in RS we choose five schools too (four elementary and one secondary), with the highest number of returnees from foreign countries and from FBH to their pre-war places of living.

The main objectives of this School Project were to support the transition period for students moving from one entity to another, so that they may freely continue with their schooling, not dropping a school year or passing additional exams in certain subjects who differ from one entity to another.

### Selection of students included in the project

In every school (eight elementary and two secondary) one teacher was engaged who has a coordinating role. The teachers formed student groups in the schools using the selection criteria in both Federation BH and RS: a) experiences of war atrocities and experience of being a refugee or internally displaced person, during the war in Bosnia and Herzegovina, b) obstructions and prevention of return to original homes despite the end of war, and c) returning to reconstructed homes after the war finished in December 1995, with their parents in no safe milieu. Exclusion criterion was lack of war experiences because they left Bosnia and Herzegovina with their families before the war started, and spent the whole war period in some foreign country.

As the project activities were considered as elective activities, the recruitment was voluntary.

### Subjects

The stratified sample of 507 students, aged of 13.7±1.0 (10 to 16) years, in primary and secondary schools, involved in psychosocial support, compared with 78 randomly selected peers from the same schools, not involved in this project. Data were collected in February 2010 and in May 2010. The Children Depression Inventory and DSM III R questionnaire for posttraumatic stress disorder (PTSD) were utilized.

### Statistical analysis

Statistical tests included descriptive statistics, Student's t-test and chi-square test. Paired sample test was used for analysis of reduction of PTSD symptoms severity after four months of School Project influences. Level of significance of differences was set to P<0.05.

## RESULTS AND DISCUSSION

All adolescents reported experience of (mean±standard deviation=5.4±2.7) without significant differences between observed and control group (F=0.001, P=0.960, ANOVA). Symptoms of PTSD and depressiveness among students involved in the School Project, significantly reduced from (mean±standard deviation=8.5±3.3 to 4.9±3.5; 7.1±3.5 to 5.8±3.2, respectively) (t=5.524, P<0.001; t=4.792, P<0.001, respectively, Pared Samples Test). In the control group severity of PTSD symptoms reduced from 8.6±3.4 to 6.5±3.6 (t=0.354, P=0.723, Pared Samples Test), while depressiveness increased from 8.7±3.9 to 11.8±6.9 (t= -3.387, P=0.001, Pared Samples Test).

In this research we found that the severity of symptoms of PTSD depressiveness were significantly reduced amongst students where the members of the School project team worked in compliance with their plan and program of psycho-social help and decrease of prevailing prejudices on acceptance and difference as well as on decrease of aggressive features among children by connecting children, parents, teachers and school management in both entities, as well as establishment of Students' clubs as a legal part of schools in which they work. Involvement of parents and teachers in the psycho-social program may have improved the home and school milieu, thereby facilitating recovery from PTSD (Goenjian et al. 1997). Students were encouraged by the project facilitators and their peers to express themselves, to engage in activities with their families and peers, and to seek support from family members at times of renewed distress.

Furthermore, such results in this research can be explained with fact that war in BH destroyed interpersonal relationships between citizens regarding ethnical belonging, so traditionally trust and confidence that were cultivated amongst neighbourhoods vanished. The actual school system based on ethnical school programs with different points of view on the history of BH war; about who is guilty for the war increased mistrust and the gap in interethnic dialogue. This comprehensive project involved students, their teachers and school directors and particularly their parents to spend a certain time together, it helped them to get over artificial and tragic ethnical division and enmity, and to re-establish trust and confidence, which help in decreasing of PTSD symptoms severity and severity of depressiveness. These findings are similar to findings of other research about the effects of psychosocial support for war-traumatized children and adolescents (Dybdahl 2001, Hubbard et al. 1995).

The PTSD and depressiveness symptoms severity among studied participants were similar to other studies or reports of PTSD and cluster symptoms among children and adolescents from Bosnia and Herzegovina (Hasanović et al. 2005, 2006, Husain et al. 1998, Allwood, Bell-Dolan & Husain 2001). The girls presented more severe PTSD symptoms than the boys involved in the School project (Goenjian et al. 1997, Hasanović et al. 2005, 2006), as well as in other researches (Smith et al. 2001, Möhler et al. 2005).

These findings showed the changed proportion in national structure related to pre-war structure of BH citizens, because of different types of involuntary migrations during and after war. Despite the end of the war, more than ten years ago, the national composition did not repair as was planned. Because of the fact that a lot of people are still living out of their pre-war homes, the continual trauma of being out of their own property is very severe.

This research has certain limitations taking into account a number of post war traumas that the children were exposed to. Measurement of PTSD and depressiveness symptoms' severity level fifteen years after the war cannot be an assurance that the obtained results are only based on war trauma consequences. The level of PTSD and depression can increase or decrease over a period of time for unknown reasons (Hasanović et al. 2006). We know little about what social experiences and additional traumas these children had after the war considering the fact that BH is in its transition period with constant changes of social framework. Finally, in terms of limitations, we point out here that participation in the program was voluntary, and this may have strong implications for its effectiveness.

Findings in this research can be used for recommendations on enhancement and improvement of primary and secondary educational system so that besides the regular teaching it should also have aspects of psycho-social support for the traumatized students. Awareness of trauma of students can help teaching staff and school management to develop more efficient approaches in their working with these students instead of a repressive approach. This School project that justified its' existence can be an example for development of new similar projects that should be included in all existing primary and secondary schools if possible. Schools and other institutions ought to envisage as many projects as possible to be implemented in schools and out-of-schools in order to assist youth to more easily overcome the consequences of war in their development. There is a need to implement health promotion and preventive programs for adolescents.

Further research is needed to better understand the psychological effects of war trauma on young war victims, and the natural course of posttraumatic symptoms, so as to improve interventions targeted to this vulnerable population (Dybdahl 2001).

**CONCLUSIONS:** Adolescents in this study reported surviving of multiple traumas. Psychosocial support within the School Project resulted with significant reduction of PTSD symptoms severity and severity of depressiveness amongst involved students compared to controls. Schools and other institutions ought to envisage as many as possible projects to be implemented in schools and out-of-schools in order to assist youth to easier overcome consequences of no favorable war in their development.

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