

## THE IMPACT OF DISPLACEMENT ON THE EXPRESSION OF DEPRESSIVE DISORDER AND SOCIAL FUNCTIONING AMONG THE WAR REFUGEES

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### SUMMARY

*Our research objective was to estimate the characteristics of major depressive disorder and social adaptation of women displaced during the war in Croatia in the early 1990s. We aimed to establish the relationship between major depressive disorder and displacement and study its impact on the outcome of depression in order to improve treatment and avoid possible complications.*

*A group of 20 women, 35 to 55 years of age, displaced some time during the 1991.-1995. war in Croatia were compared to 27 women of the same age but with no experience of exile. All the patients suffered from major depressive disorder based upon DSM-IV diagnostic criteria. The Hamilton Rating Scale for Depression, the Zung Self Rating Depression Scale and the Social Adaptation Self-evaluation Scale were used.*

*The objective intensity of depression of the displaced significantly decreased over time but not their personal experience of depression. All depressed patients manifested poor social adaptation. Many aspects of social functioning remained poor even after the improvement of depressive disorder. Displacement characteristics were: the length of time spent in exile, the place, and the circumstances of displacement regarding the members of the family accompanying the displaced women. These characteristics significantly influenced the expression of their major depressive disorder as well as social functioning.*

*Displaced persons/refugees are at high risk of developing depressive disorder. Recognition of all risk factors and early diagnosis of depressive disorder followed by appropriate treatment could decrease the risk of chronic and complicated depression as well as the risk of poor social adaptation.*

**Key words:** displacement – refugees - depressive disorder - social functioning

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### INTRODUCTION

Nowadays depression represents a serious health problem and according to the World Health Organization, Mental Health 2001, it is the fourth main reason of invalidity occurrence across the world, with a lifetime incidence of 10% in men and about 20% in women (Blazer 1995). Depressive symptoms include diminished interest in everyday activities, sleep disturbances, hyperactive or inhibited behaviour, feeling of energy loss, fatigue, inefficiency, often variations in body weight, reduced ability in concentrating, undecidedness, low level of self-esteem associated with worthlessness and frequent thoughts regarding

suicide. A great problem is the fact that only half of the affected people have depression diagnosed and just half of the diagnosed persons receive treatment; consequently there is an immense risk of complications and chronicity (Agency for Healthcare and Research 1993, Lepine et al. 1997).

Stressful life events precede or alleviate the appearance of a depressive disorder. The incidence of negative life events is much more frequent during war. The population is exposed to life threatening situations, material losses and gross migration shifts. Exile presents one of the most severe forms of psychosocial stress. Due to concurrent endangerment of existence, psychosomatic health problems and reduces social standing

among refugees are exposed to accumulated stress. Essential psychological characteristics concerning experience of exile is loss, because loss of home is very detrimental to health. Home constitutes the basic security of every person, providing one with identity, privacy and family unity. Therefore the loss of a home is actually a loss of one's security, confidence and faith in oneself (Vizek-Vidović 1992, Kendler et al. 1995, Fullilove 1996). In time span, the losses and adjustments to new life circumstances are continually threatening mechanisms of accommodation in refugees, making them more susceptible to psychiatric disorders especially depression. The post-war return of refugees to their homes has been yet another additional burden considering the fact they had already been worn out by displacement. This fact will only aggravate existing psychiatric disorders and contribute to emergence of new ones. Therefore, it is not unusual for a number of health problems, especially psychiatric disorders, to exist long after the termination of displacement. Persons who spent part of their lives in exile present a risk group and also require attention in time of peace.

Large migration movements in Croatia have been caused by the war between 1991 and 1995, and also during the war in neighbouring Bosnia and Herzegovina. According to the Office for civil victims of war in Croatia, in January 1995, there were five hundred thousand refugees in Croatia (Kozarić-Kovačić & Folnegović-Šmalc 1995).

The recent literature is prolific with data regarding psychiatric disorders in persons exposed to adverse war conditions such as displacement and exile. Distinctive manifestations of depressive disorder are noted among refugees from Bosnia located in American shelters and in Norway (Weine et al. 1995, Weine et al. 2000, Brunvatne et al. 1995), among South-Asian refugees located in Canada (Beiser & Hayman 1997), in Cambodian women refugees in France (D'Avanzo & Barab 1998), in Bosnian refugees settled in a refugee center near Varaždin (Mollica et al. 1999), in Cambodian refugees settled in Utah (Blair 2000), and in refugees from North Africa (Fox et Tang 2000).

The aim of our research was to estimate the characteristics of major depressive disorder and social functioning of women displaced during the war in Croatia and to explore the impact of displacement on the outcome of depression in order to improve treatment and avoid possible complications.

## SUBJECTS AND METHODS

A group of 20 depressed women who had spent some time in exile during the Croatian war and a group of 27 depressed women who were not displaced at the same time were monitored. Both groups came to seek psychiatric help for the first time during a one-year period of time (2002.-2003.). The inclusion criteria were major depressive disorder based upon the criteria of the Diagnostic and Statistical Manual of Mental Disorder-IV and defined by at least 17 scores on the Hamilton Rating Scale for Depression; female gender; and age from 35 to 55 years. Male gender was excluded because a non-significant number of primary depressed male subjects was detected during the research period, since most males were soldiers already suffering of posttraumatic stress disorder. Subjects older than 55 were excluded in order to avoid any involuntal cause for the expression of depressive disorder. The Zung Self Rating Depression Scale and the Social Adaptation Self-evaluation Scale were used. Follow up of the patients was performed by repeating the research procedures two years later. During the research period the displacement had not yet ended for all the subjects although the war was over.

All procedures were carried out with adequate explanation and the written consent of the subjects.

Statistical small samples procedures were completed by using SPSS/PC for Windows. Depending on the data, parametric and non parametric procedures (t-test of independent samples, differential method, Wilcoxon test) were used. The observed values were measured by Pierson's coefficient of correlation, and the significance was tested. The observed differences at the critical value of less than 5 and 1% were considered statistically significant.

## RESULTS

Our one-year study included 47 women with an episode of a major depressive disorder.

In the Croatian war for independence, during 1991.-1995, 20 women had displacement experience. The other 27 women were living in war affected areas. Two years later, our research with 18 refugees and 18 patients without displacement experience continued. Ten of them (56%) from each group suffered from depressive disorder even two years later. Half of our female

refugees (10) suffered displacement for less than one year and little less than half of them (9) were displaced for five or more years. The most frequent place of accommodation was with relatives. Nearly two thirds of them were displaced with only a part of their family.

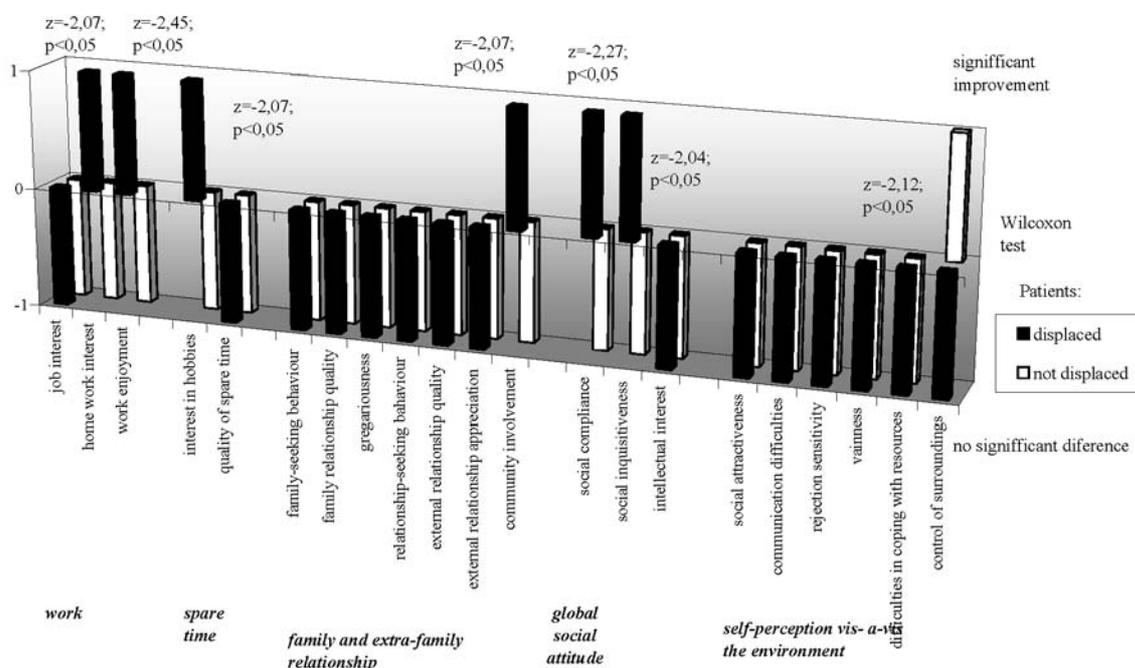
According to average scores on the Hamilton Rating Scale for Depression (HRSD) and the Self Rating Depression Scale (SRDS), a significant

difference in severity of depressive disorder among patients at the baseline research point and two years later has not been found. The only exception found was the intensity of depressive disorder which considerably attenuated ( $p < 0.01$ ) with time. However, all patients assessed their depression as mild: the scores on SRDS were within range of 41–47 points which is consistent to mild-level depression (Table 1).

**Table 1.** The average scores on Hamilton Rating Scale for Depression (HRSD) and Self Rating Depression Scale (SRDS) of displaced and not displaced depressed patients, on baseline and two years later

Patients	HRSD		SRDS	
	Baseline	Two years later (depressed)	Baseline	Two years later (depressed)
Displaced	N=20 27.05 ± 3.27	N=10 23.10±4.43 t=4.33; p<0.01	N=20 41.15±3.20	N=10 43.50±4.20 t=-1.45; not significant
Not displaced	N = 27 26.96 ± 4.25	N = 10 23.80 ± 5.10 t=1.78; not significant	N= 27 43.30±4.53	N= 10 45.60±4.53 t=-2.05; not significant

Diferential method



**Figure 1.** Social functioning among patients who were not depressed after two years period (according Social Adaptation Self-evaluation Scale (SASS))

At baseline on the Social Adaptation Self-Evaluation Scale (SASS), all patients gain average scores within the range of 24–34 which were in correspondence with social adjustment beneath normal (35–52); there was no difference among

patients expressing depression two years later as they were on the verge of social maladjustment (25 points). Improvement in social functioning was found in groups of patients who were not depressed after the two years period but the only

significant improvement was found in the refugee group (Table 2). Of interest was the fact that in all non-depressed patients, expression of most statements on SASS did not significantly change in

relation to the research baseline point although from today's point of view, they are considered to be healthy individuals (Figure 1).

**Table 2.** The average scores on Social Adaptation Self-Evaluation Scale (SASS) of displaced and not displaced patients, on baseline and two years later

Patients	Displaced	Not displaced
Baseline	N=20 26.10±10.32	N=27 30.41±9.65
Two years later (depressed)	N=10 25.30±11.20 t=-0.75; not significant	N = 10 26.10±7.55 t=0.83; not significant
Two years later (not depressed)	N=8 39.75±4.56 t=-2.42; p<0.05	N=8 38.75±9.74 t=-1.56; not significant

Diferential method

Displacement characteristics such as: time spent in displacement, accomodation during displacement and family circumstances during that time (with whom the patient spent her time during the displacement) were put into correlation with the characteristics of major depressive disorder and social adaptation (according to items on HRDS, SRDS and SASS). These significant relationships were identified:

**Relationship between displacement and major depressive disorder characteristics:**

*Time spent in displacement:*

With lenght of displaced time:

- overall depression severity weakened (r=-0.80; p<0.05; SRDS), but the signs of vegetative activation were more intense (r=0.66; p<0.05; SRDS) and the loss in work interest (r=0.79) and feeling of guilt (r=0.74; p<0.05; HAMD) were more distinctive.

The shorter time spent in displacement correlated with:

- more intense feeling of discomfort and anxiety (r=-0.52; p<0.05; SRDS), while the „simptomatic negative“ statements : usual diet (r=-0.80; p<0.05), thinking clarity (r=-0.93; p<0.01); and sense of efficacy (r=-0.80; p<0.05; SRDS) were more distinctive.

*Accomodation during displacement:*

Difficulties in decision making (r=-0.59; p<0.01; SRDS) were pronounced while staying at relatives.

General physical symptoms (r=0.71) and genital symptoms (r=0.75; p<0.05; HAMD) were pronounced while staying with acquaintances.

Pronounced weight loss (r=-0.71; p<0.05; HAMD) correlated with refugee settelment.

Frequent changes in accomodation correlated with better adjustment/ ability of enjoying oneself earlier ( r= - 0,48;p<0,05; SRDS ).

*Family circumstances during displacement:*

Displacement with the whole family correlated with:

- heavier depressive disorder in general (r=-0.72; p<0.05);
- deeper depressive mood (r=-0.64; p<0.05);
- higher suicidality rate (r=-0.78; p<0.01);
- poor sense of efficacy (r=0.57; p<0.05).

Displacement with a part of their family /mostly only with children/ (HAMD) correlated with:

- lower psychomotor inhibition (r=-0.47; p<0.05);
- lower feeling of guilt (r=-0.45; p<0.05).

**Relationship between displacement and social adjustment characteristics:**

*Time spent in displacement:*

More time spent in displacement indicated:

- communication difficulties (r=0.45; p<0.05);
- more intensive control over surroundings (r=0.50; p<0.05);
- lower social compliance (r=-0.76; p<0.05);
- lower social interest (r=-0.73; p<0.05).

#### *Accommodation during displacement:*

While staying with acquaintances: work interest ( $r=0.47$ ), housework interest ( $r=0.55$ ) and work pleasure ( $r=0.45$ );  $p<0.05$  were more pronounced.

Frequent accommodation shifts correlated positively with relationship-seeking behaviour ( $r=0.71$ ) and intellectual interest ( $r=0.70$ );  $p<0.05$ .

#### *Family circumstances during displacement:*

Female refugees who were displaced with a part of their family /mostly only with children/:

- manifested overall improved social functioning ( $r=0.70$ ;  $p<0.05$ );
- expressed more housework interest ( $r=0.76$ ;  $p<0.01$ );
- had better spare time quality ( $r=0.65$ ;  $p<0.05$ )
- showed better external relationship quality ( $r=0.74$ ;  $p<0.05$ );
- more intensive social attractiveness ( $r=0.66$ ;  $p<0.05$ ).

## DISCUSSION

Numerous authors have been reporting about depressive disorders in refugees. In a group of 404 refugees from Southeast Asia displaced to the USA were reported on from the Minneapolis Community Clinic in 1989. Kroll and associates found that three fourths of the studied group fulfill the criteria for major depressive disorder. Mental disorders in a group of twenty Bosnian refugees who had witnessed ethnic cleaning, have been studied by Weine and associates in 1995. Thirty five percent had depressive disorders. In 1996 Allden and assistants indicated the existence of depressive disorder in 38% Burmanese refugees after being in exile over a period of four or five years. In 1998 D'Avanzo and Barab estimated that among a group of 155 Cambodian female refugees, 87% of women displaced in France and 65% of them located in USA had symptoms of a depressive disorder. In 1999 Mollica and assistants published results of a study which was conducted three years earlier in a group of 534 Bosnian refugees located in the Refugee center in Varaždin. They identified the prevalence of the major depressive disorder in 39.2% examinees. The same authors repeated their research three years later and published the results in 2001. The Refugee center housed 34% of the examinees from the baseline research. Out of 207 examinees who, in 1996, had depressive disorder, 43% of them still depressed three years later.

Among refugees, who earlier at baseline were without symptoms, 16% manifested psychiatric symptoms, mostly depression. According to research by Gernata and associates in 2003, out of 51 Afganistanian refugees displaced in the Netherlands, 57% had depressive disorders. In 2003 Sabin and associates, published the results of research conducted in a group of Guatemalan refugees (106 people) who had been living in Mexico for twenty years. The symptoms of depressive disorder appeared in 38.8%. Exploring the prevalence of depression in Ethiopian refugees displaced in Toronto, in 2004, Fenta and assistants published that it was 9.8% while, in Etiopia, it was only 3.2%.

There are certain disparities between the objective assesment of depression severity and the subjective experience by the patient himself. In our research female patients underestimated their total depressive experience, probably due to interpreting possible symptoms as due to the objectively difficult social situation in exile.

In 1995 Cheung and Spears investigated the impact of psychosocial factors on maintaining "minor" psychiatric disorders in Cambodian refugees displaced in New Zealand. Chronic post-migration stressors and life events, poor social support and extremely poor social models of adjustment caused the existance of "minor" psychiatric disorders. The results of a three year follow-up of social adjustment of Vietnamese refugees in Norway were published by Hauff and Vaglum in 1997. After a three years period, 54% of refugees enhanced their social network and developed favorable contact with other Vietnamese refugees, while only 17% developed an equally good contact with Norwegians, where the knowledge of Norwegian language was the only significant predictor. In a new enviroment, within their ethnic group, refugees preserved the ability of renewing their social contact network. In the same year, Silov and assistants investigated the connection between the post-migration stressors and psychiatric disorders in 40 refugees displaced in Sydney. They found that loneliness and leisure were in direct association with anxiety and depression. In 1997 Westermeyer and Uecker have regularly monitored the group of refugees located in the USA and found that their hostility increased over time. This was directly associated with adverse living conditions, financial shortage, marital problems, loss of leadership role and the

loss of control over the environment. In 1998 Sundquist and associates worked with 120 women from Bosnia displaced in Sweden; 38% of them had poor general health and quality of life in comparison to 23% Swedish women. The poor quality of life was most often manifested through poor spare time quality, and the loss of appetite and memory. Assessing the social functioning of refugees from the ex-Yugoslavia region, Wim van den Heuvel stated in 1998 that the capability of job performing and housekeeping was preserved which means that they had interest in everyday life activities. The overall social functioning, including going out, having company and realising broader social contacts was low. In 2005 Wallin and Ahlstrom published research results of appraising social accommodation of 11 of 34 refugee adolescents after they had lived in their new homeland for ten years. Most of them settled in a new environment and developed a network of social contacts within their own ethnic group, while the contacts which they formed with the Swedes were mostly just professional. Only few of them remained poorly adapted and they tended to depression.

In our research, the female refugees who remained depressed after two years, were still displaying adverse social adjustment. In addition, depressive disorders obviously depleted already weakened adjustment capabilities and thereby disrupted the process of social accommodation. Thus, the fact is that the female refugees, who were not depressed after two years, had a significantly better social adjustment.

Regarding the influence of refugees experience on clinical features of depression various data have been presented. According to McKelvey and Webb (1997) the living conditions during Vietnamese refugees stay in a transit centre and later in a refugee camp were not in correlation with social support level and severity of depression or anxiety.

According to our research results, symptoms of inhibition (psychomotor retardation and feelings of guilt) were mild in the situation where female refugees with depression had a part of their family as support. Presumably, taking over a main role in care for the remaining family members (referring mostly to the care for children while in displacement) had an effect on developing a more active role in a new situation. Prolonged stay in displacement contributed to increase in apathy and self-blame. Dissatisfaction and neurasthenic disturban-

ces were developed mostly due to sharing of mutual accommodation and lacking the usual comfort of having one's own home. The effort in adjustment to living in a refugee settlement demanded considerable accommodation strain and lead to the manifestation of physical exhaustion symptoms.

Based on the self-assessment method of depressive disorder used in our research, we concluded that exile characteristics particularly affected the experience of depression itself among female refugees. Shorter stay in displacement was accompanied by an intense sensation of discomfort and anxiety. However, with prolonged displacement, symptoms alleviated. Still, the intense vegetative activation remained over time, reflecting the functioning of the persisting stress-model. With a prolonged stay in displacement, the overall severity of depression attenuated. While the optimistic way of thinking was expressed through a shorter stay in displacement, the prolonged stay caused pessimism associated with uncertainty and loss of hope concerning the return home.

Living in common accommodation significantly restrained and inhibited freedom of making decisions, while frequent change in accommodation resulted in better adjustment. Staying in displacement with a complete family lead among female refugees to loss of leadership role and not taking initiative. Therefore, they expressed more severe depressive disorder with marked symptoms of depressed mood, hopelessness and uselessness.

In our research the following specific features of relationship between displacement and social adjustment were pointed out: accommodation during displacement, in known environment, resulted in greater work performance, whereas placement in a refugee settlement lead to passivity and low level work functioning. Female refugees who frequently changed their residence showed a better level of adjustment. Displaced women, having only children by their side, without other family members, manifested more intense work and social initiative along with overall better social functioning. A shorter stay in displacement was reflected in overall better social functioning whereas the prolongation of displacement amplified the communication difficulties and was mostly associated with the length of uncertainty and consequential apathy.

Various reports suggest possible predictors of depression among displaced persons and refugees. In 1996, while observing groups of refugees from

Southeast Asia and Pacific islands and a group of British emigrants in New Zealand, Pernice and Brook identified difficulties arising from coming into the new environment such as: discrimination experience, inability of establishing close friendships, unemployment and staying only within one's own ethnic group, which directly resulted in expression of anxiety and depression. During the same year Lavik and associates issued that age, sex, unemployment and low level of education presented predictors for the manifestation of depression and anxiety in refugees displaced in Oslo. The predictors of aggressive and intolerant behaviour were found to be the refugee status, unemployment and maleducation. In 1997, Hinton and associates published, that having veteran status, age, poor knowledge of language, Vietnamese ethnic affiliation and pronounced depression at baseline of research contributed to development of a severe level of depression after some time. Although traumatic experiences before having been in displacement represent predictors for later development of depression, the authors concluded that over a period of time the sociodemographic characteristics gain greater significance. They conducted research with 114 Vietnamese refugees in the first six months of being in displacement and then twelve to eighteen months later. In 1998 Win van den Huevel stated that the refugees and the displaced from the region of ex-Yugoslavia displayed a lower level of mental health, stronger depression, poor performance of everyday duties and generally poor social functioning. In 2002 Gernat and assistants found that, in Afganistanian refugees displaced in Drentheu, the predictors of depressive disorder were their poor knowledge of language, a low level of education and unemployment. In 2003 Sabin and associates listed the predictors of depression in Guatemalian refugees who had been in Mexico for twenty years: female sex, widowhood, marriage, history of being a witness of violent abduction and survival of several traumatic experiences. In 2004 Fenta and associates determined that depression predictors in a group of Ethiopian refugees were: younger age, traumatic experience before being in displacement, staying in refugee camps and stressful events linked to social adjustment on arrival at the place of displacement.

One of the most important conclusions which followed the presented studies is also congruent with the results of our research: it is the

chronification of psychiatric disorders in a population of displaced persons and refugees. In 2001, Mollica and associates published that incidence of chronification in depression occurred two to four times more often than in the general population, where chronification incidence after two years was found to be 10-20% (Angst 1997). The same authors indicated that the disability represents a chronic state and they described it in 46% refugees after three years. Thus they validated the early established connection between chronic depression and disability (Wells et al. 1989, Murray et al. 1996).

## CONCLUSION

Our one-year research included 47 female patients with an episode of major depressive disorder.

Twenty female refugees had a displacement experience during the Croatian war for independence, 1991 through 1995. The other 27 women lived in war affected areas. Ten of them (56%), from each group, suffered from a depressive disorder even two years later.

The depression severity was markedly reduced in our female refugees as the time passed. In all refugees the depressive experience was diminished through rationalization of post-war period difficulties. At the baseline research point, all refugees had manifested poor social adjustment and the same difficulty remained present after two years period. With regression of depressive symptoms, social adjustment became considerably better in refugees.

Displacement circumstances affected the manifestation of a major depressive disorder.

The shorter stay in displacement was accompanied by intense discomfort and frustration and with the prolongation of displacement. The mentioned symptoms, improved because of adjustment, but were substituted by vegetative arousal. With a more prolonged stay in displacement the overall severity of depression reduced.

Living in common accommodation during exile led to dissatisfaction, neurasthenic disturbances and difficulties in decision making. Residence in a refugee settlement presented as physical exhaustion. Refugees who have had frequent accommodation shifts during displacement performed usual activities more easily.

Refugees, who were in displacement with some family members, took on the role of leader and were more active. However, refugees who were in exile with their whole family manifested no initiative, had more severe depressive disorder with intensive depressive mood, hopelessness, a sense of uselessness and were prone to suicidal thoughts. With improvement of depression, the symptoms of vegetative arousal among them were more intense.

The displacement circumstances had an effect on the ability of social adaptation among refugees who suffered of major depressive disorder. A shorter duration of exile, familiar environment, frequent accommodation shifts and refugee displacement with some family members led to improvement in social adaptation.

The symptoms of depressive disorder persisted even when depressive disorder had no current clinical manifestation. The same thesis was also valid for numerous features of poor social adjustment.

Therefore, refugees were considered a risk group for development of depressive disorder. Psychiatric disorders which are present in the early stage of displacement are possible predictors of chronic impairment of mental health and disability. By recognizing all risk factors associated with the sensitive refugee group, early diagnosis of psychiatric disorders (depression in the first place), followed by appropriate treatment, the risk of chronification and complication of depression as well as of poor social adaptation could be significantly decreased.

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