Psychopathology and Well-Being in Civilian Survivors of War Seeking Treatment: A Follow-Up Study

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The goal of the current study was to examine types of exposure to traumatic events and affective and anxiety disorders of 81 civilian war survivors seeking treatment for war-related stress almost one decade following the war in the area of former conflict. Furthermore, the study investigated changes in symptoms of mental health and in well-being amongst these individuals during a treatment period of 6 months. The results indicated that civilian war survivors seeking treatment reported multiple war-related traumatic events and high levels of psychiatric morbidity. Individuals assessed at follow-up (n = 67) reported no change in post-traumatic stress symptoms or psychological well-being, but improvement in symptoms of depression, overall psychiatric distress and quality of life. The only significant difference between participants classified as achieving clinically significant improvement as compared with those who did not achieve such change was in less symptom severity of depression, post-traumatic stress, general distress and higher psychological well-being at the time of first assessment. Neither the assessment of initial diagnoses nor war or post-war trauma types emerged as significantly different amongst the two groups. Copyright © 2009 John Wiley & Sons, Ltd.

Key Practitioner Message:
- Civilian survivors of war seeking treatment report high levels of psychiatric morbidity.
- Treatment for survivors of war may require adaptations to evidence-based treatments based on their culture and life circumstances in order to recover from PTSD and experience general emotional relief.

Keywords: Civilian War Trauma, PTSD, Depression, Anxiety, Treatment, Well-Being

Millions of individuals and whole communities worldwide have suffered and/or continue to suffer from prolonged war-related traumatic stressors. According to recent estimates, 28 wars and 14 armed conflicts were taking place around the world in the year of 2005 (Schreiber, 2006). A large number of studies have reported high levels of psychopathological distress amongst civilian survivors of war (see Johnson & Thompson, 2008), including those in Kosovo where the current study took place (Cardozo, Kaiser, Gotway, & Agani, 2003; Kashdan, Morina, & Priebe, 2009). Mental health opportunities for those affected by war are...
rather scarce given the fact that the overwhelming majority of those individuals live outside the Western countries (Brundland, 2000) where mental health services had not been on the agenda anyway or were destroyed during the war. Due to the accumulated knowledge about the long-term effects of war-related events (e.g., Amir & Lev-Wiesel, 2003), in the recent years there has been an increase in the attempts to help post-war societies.

However, these projects seem to be very short-lived. For instance, there have been reports that in the first year following the war in Kosovo, such projects made up to 60% of the budgets of health and social services and only 2 years later this percentage was lower than 10% (Mental Disability Rights International, 2002). Yet, in particular cases, such help from the wealthier countries might facilitate the establishment of local mental health projects. One such project with relevance to the current study is the Kosova Rehabilitation Centre for Torture Victims (KRCT). Established in 2000, the KRCT has been the only professional rehabilitation centre in Kosovo dealing with torture victims and traumatized persons suffering from post-traumatic stress disorder (PTSD) and other related disorders. The services of the KRCT cover psychotherapy, psychiatric treatment, physical treatment and socio-legal support.

There is need for research on the mental health of civilian war survivors who seek treatment at centres established for the treatment of this population, such as the KRCT. Therefore, the current study examined the mental health of survivors of war who seek treatment for mental health problems related to war. The study was carried out in Kosovo that underwent a 10-year political repression and a subsequent full-scale war beginning in 1998 and ending by North Atlantic Treaty Organization air strikes in mid-1999.

The first aim of the study was to examine types of exposure to traumatic events and the prevalence rates of mental disorders amongst civilian war survivors seeking treatment. Our second objective was to examine the changes in symptoms of depression, post-traumatic stress, and well-being of clients seeking treatment over a period of 6 months.

METHOD

Sample and Procedure

The data for this study were collected in the KRCT in 2007 and 2008 (i.e., 8 and 9 years after the war). The interviews were conducted by the staff of the KRCT and no inter-rater reliability was measured. Altogether, 120 clients registered to receive cognitive behaviour therapy (CBT) treatment were invited to participate, following a protocol approved by the human rights and advocacy committee of the KRCT. Thirty of the contacted individuals refused to participate in the study, either reporting not having time for the interview ($N = 17$) or not wanting to talk about the war again ($N = 13$). Due to missing data nine participants were excluded, resulting in a participation rate of 68%. The non-participants did not differ from participants in gender or age.

The average age of the participants ($N = 81$) was 44.2 (SD = 11.5), and ranged from 20 to 69 years. The sample consisted of 69.1% women. The majority of the participants (82.7%) were married, 4.9% were single and 9.9% were widowed. The unemployment rate was 75%. A majority (60.5%) of them were from rural areas. All clients were seeking treatment for what they regarded as consequences of war-related experiences.

The psychotherapeutic treatment provided at the KRCT is CBT. Prolonged exposure and cognitive techniques are used to treat post-traumatic symptoms. The trauma-focused CBT incorporates psycho-education, imaginal and in vivo exposure to reduce avoidance of memories of the traumatic experiences and associated distress, and reappraisal of trauma-related cognitions. With clients with depressive symptoms or other relevant symptoms additional CBT techniques are used (e.g., behavioural activation, reappraisal of depressive cognitions).

Psychotherapy sessions at the KRCT initially were scheduled for regular appointments on a weekly basis. However, regular scheduling failed for a mixture of reasons. People in Kosovo were not used to fixed multiple appointments and often either did not attend or did not show up on time. Furthermore, financial difficulties prevented some clients from being able to pay for the travel costs or required them to miss appointments due to having to be at work. Thus, the psychotherapy actually was delivered at irregular intervals. None of the clients in the current study completed the whole treatment package at follow-up. The irregularity and incompleteness of attendance is likely to have diminished the effectiveness of the CBT, including interfering with the therapists’ ability to assist their clients in meaningfully transitioning from the preparatory phase to the trauma-focused phase, and finally to the closure phase of treatment for traumatic stress disorders (Ford, Courtois, Steele, Hart, & Nijenhuis, 2005).
Measures

Traumatic events were measured using an adjusted checklist for war-related events that is based on the first part of the Harvard Trauma Questionnaire (Mollica et al., 1992). This checklist assesses 18 potentially war-related traumatic events and has been used before in the Kosovar population (Cardozo et al., 2003; Morina, 2007).

The MINI International Neuropsychiatric Interview (MINI; Sheehan et al., 1997; Albanian version: Morina, 2006) is a structured diagnostic interview based on Diagnostic and Statistical Manual of Mental Disorders-IV (DSM-IV) and International Classification of Diseases-10 (ICD-10) criteria, which require a fixed number of symptoms, a minimum duration of symptoms and clear evidence of impairment in social or daily functioning. Major depressive episode (MDE) and anxiety disorders (panic disorder, social phobia, agoraphobia, generalized anxiety disorder, PTSD, obsessive–compulsive disorder) were assessed with the MINI in the current study. The clinician-rated format of the MINI has demonstrated good reliability and validity in comparison with the Structured Clinical Interview for the DSM and Composite International Diagnostic Interview (Sheehan et al., 1998).

The severity of depressive symptoms was assessed with the Beck Depression Inventory (BDI; Beck, Steer, & Brown, 1996), which is a 21-item self-report inventory with each item scored from 0–3. Scores 0–13 have been shown to reflect minimal depression, 14–19 mild, 20–28 moderate and 29–63 severe depression. Adequate correlations with several clinical assessment ratings of depression have been reported (Beck et al., 1996). The Albanian version of the BDI (Morina, Rudari, Bleichhardt, & Prigerson, 2009) reached an internal consistency of 0.86.

PTSD was assessed with the Post-traumatic Stress Diagnostic Scale (PDS; Foa, Cashman, Jaycox, & Perry, 1997). The PDS assesses the 17 PTSD symptoms specified in the DSM-IV. The items are scored on a 4-point Likert-type scale ranging from 0 (never) to 3 (five times per week or more/nearly always). In addition to the presence–absence of PTSD, the PDS also measures the overall severity of PTSD symptoms. The PDS has shown good psychometric properties (Foa et al., 1997). In the current study, the internal consistency of the Albanian version of PDS (Morina, Böhme, Morina, & Asmundson, submitted) was 0.94.

The Brief Symptom Inventory (BSI; Derogatis & Melisaratos, 1993; Albanian version: Morina, 2007) is a 53-item scale of psychological symptoms and psychopathology experienced during the prior week. A general severity index is calculated by summing all scores. All scales range from 0 (‘not at all’) to 4 (‘extremely’). The internal consistency of the Global Severity Index of the BSI in the current sample was 0.93.

The brief version of the Psychological Well-Being Scale (PWBS; Ryff & Keyes, 1995) was used to assess six areas of psychological well-being: autonomy, environmental mastery, purpose, positive relations with others, positive self development and self-acceptance. The scale aims at capturing multiple aspects of positive psychological functioning, not just a simple assessment of happiness or life satisfaction. The dimensions of the PWBS have been identified as important in mental health, clinical and life-span developmental theories (Ryff & Singer, 1996). Responses are made on a 6-point scale (1–6), with higher scores indicating greater well-being. The brief version correlates acceptably (0.70–0.89) with the 84-item full scale. In this study, only the total score for overall well-being was used. The internal consistency of the PWBS translated by the first author for this study was 0.77.

The Manchester Short Assessment of Quality of Life (MANSA, Priebe, Huxley, Knight, & Evans, 1999; Albanian version: Morina, 2007) was used to assess subjective quality of life. The MANSA contains 12 questions to assess global life satisfaction and facets including: social relationships, family relationships, work, leisure, sex life, financial situation, living situation, personal safety, and physical and mental health. The scales measuring subjective quality of life range from 1 (‘couldn’t be worse’) to 7 (‘couldn’t be better’). There are also four objective items measuring whether individuals have a ‘close friend’, seen a friend over the past week, been arrested and been a victim of a violent crime. The MANSA is able to differentiate clinical outpatients from healthy control groups and shows strong positive correlations with larger comprehensive measures of life satisfaction and quality of life (e.g., d’Ardenne, Capuzzo, Fahoury, Jankovic-Gavrilovic, & Priebe, 2005; Priebe et al., 1999). For the current study, only the 12 items measuring general and facet levels of quality of life were used (α = 0.89).

RESULTS

Traumatic Events

All participants reported multiple war-related potentially traumatic events. With the exception of sexual abuse, all measured events were reported...
by at least 50% of the participants (see Table 1). Twenty-one participants (25.9%) also reported post-war potential traumatic events. The post-war potentially traumatic events reported by more than one participant were death of family members \((n = 6)\), suicide of family members \((n = 4)\), domestic violence \((n = 3)\) and serious illness of family members \((n = 2)\).

**Prevalence of Depression, Anxiety Disorders and Somatization**

Estimates of the prevalence of the affective and anxiety disorders are presented in Table 2. Only one participant did not meet criteria for any disorder. Nine participants (11.1%) met criteria for one disorder, 13 (16.0%) for two disorders and the remaining participants (71.6%) had three or more disorders. The most frequently occurring combinations of two disorders were current MDE and PTSD (58.0%), PTSD and Generalized Anxiety Disorder (GAD) (48.1%) and current MDE and GAD (45.7%). The over representation of current MDE, PTSD and GAD was also significant, \(\chi^2 = 16.91, df = 1, p < 0.001\). Of the participants with GAD, 90.7% had co-morbid PTSD, whereas 48.6% of those without GAD met criteria for PTSD. Alternatively, 69.6% of the participants with PTSD had co-morbid GAD, whereas 18.2% of those without PTSD had GAD.

The relationship between MDE and GAD yielded non-significant results, as did the associations between somatization disorder and the three most prevalent disorders (current MDE, PTSD and GAD) (i.e., all \(p > 0.05\)). The co-morbidity between somatization disorder and the three most prevalent disorders was as follows: somatization disorder and MDE = 6.2%, somatization disorder and PTSD = 12.3% and somatization disorder and GAD = 1.1%.

**CHANGE OVER TIME WHILE RECEIVING TREATMENT**

Sixty-seven patients out of the original sample of 81 were re-interviewed after the 6 months follow-up period. The 14 patients did not participate for the following reasons: immigration \((n = 5)\), addresses were not correct \((n = 4)\), married and moved away \((n = 3)\) and rejected re-interviewing without further explanation \((n = 2)\). Thus, altogether, 67 participated in the follow-up assessment after 6 months (80%, i.e., 67/84). Furthermore, due to missing values the data of three participants were excluded from the analysis, resulting in a final of 64 participants. The 17 clients who did not participate in the follow-up did not differ significantly from the individuals who participated in the follow-up with respect to age, gender or mental health at baseline.
The 67 clients who participated in the follow-up had an average of seven sessions of psychotherapy. However, the range of the number of sessions ranged from 1 to 36 as the therapeutic work at the KRCT is not based on regular intervals.

Table 3 summarizes differences in symptoms of depression and post-traumatic stress as well as in quality of life and psychological well-being between the first and the second assessment. At follow-up, the clients had markedly lower symptoms of depression as measured with the BDI as well as symptoms of psychiatric distress as measured with the BSI. However, there was no change in symptoms of post-traumatic stress as measured with the PDS. With regard to well-being, the follow-up results of quality of life as measured with the MANSA showed significant improvement over time. Yet, there was no change in psychological well-being as measured with the PWBS.

Twenty-four (i.e., 35.8%) participants were classified as having achieved clinically significant change based upon improvement on the BDI or BSI to within one standard deviation of non-clinical Mean scores and positive change on the MANSA. Participants who achieved clinically significant improvement did not significantly differ in their initial report of having experienced different types of war-time potentially traumatic events or in the number of types of war-time potentially traumatic events reported. There was also no significant difference with respect to reporting post-war potentially traumatic events. The two groups of participants also did not differ with regard to the presence of any diagnosis measured in this study or the number of the co-morbid diagnoses. Finally, the two groups also did not differ in age or gender.

There was, however, a significant difference between the two groups on the initial severity of symptoms of depression as measured with the BDI, post-traumatic symptoms as measured with the PDS, symptoms of general distress as measured with the BSI and psychological well-being as measured with the PWBS (see Table 4). Participants classified as achieving clinically significant improvement had reported significantly less severe symptoms of depression, post-traumatic stress, and general distress, and higher levels of psychological well-being at the time of first assessment. A comparison of the absolute amount of change on the symptom, quality of life and personal well-being measures showed that participants who achieved clinically significant change did differ from those who did not achieve clinically significant change on symptoms of depression as measured with the BDI, post-traumatic symptoms as measured with the PDS, symptoms of general distress as measured with the BSI and quality of life as measure with the MANSA. However, there was no significant difference between the two groups with regard to the psychological well-being as measured with the PWBS.

DISCUSSION

The present study investigated the mental health and well-being amongst treatment-seeking survivors of war. Participants reported extremely high prevalence rates for the various types of potentially traumatic war events, including almost universal endorsement of exposure to combat, and more than 90% reporting forced evacuation and deprivations of shelter, food and health care that placed them at risk for serious physical complications. Potentially traumatic loss—due to the murder of or separation from family, and witnessing or being at imminent risk of death or intentional harm—were reported by more than three quarters of respondents. Between half and two-thirds of respondents
reported torture, imprisonment, physical abuse by combatants or other physical injury. Thus, consistent with other studies’ findings concerning civilians exposed to war (Johnson & Thompson, 2008) and particularly those who seek mental health treatment (Michultka, Blanchard, & Kalous, 1998; Miller et al., 2002), the sample was almost entirely comprised of persons who had been displaced from their homes due to threat of death or violence, and their tendency to report experiencing multiple forms of other war-related potentially traumatic experiences.

Almost a decade after the war, these adults who were seeking treatment due to their war-related experiences still suffered from substantial psychological distress. This finding is consistent with prior reports of psychiatric morbidity (Johnson & Thompson, 2008; Roberts, Damundu, Lomoro, & Sondorp, 2009) and quality of life (Besser & Neria, 2009) amongst civilians exposed to other wars. As expected, the estimated prevalence rates of depression, anxiety disorders and somatization observed in the present study were higher than those found in studies of the Kosovar population with non-clinical samples. For instance, Cardozo et al. (2003) and Morina and Ford (2008) found a prevalence rate of PTSD of 25%. Also, Morina and Ford (2008) found a prevalence rate of depression of 31% in the general population. The specific association of war events with PTSD symptoms and post-war ‘exile-related’ stressors with depression symptoms reported by Miller and colleagues (2002) was not found in the present study.

Those clients who were assessed at follow-up reported no change in post-traumatic stress symptoms. Yet, there was significant improvement in symptoms of depression and symptoms of general distress. Additionally, the clients also reported significant increase of their quality of life. The latter finding, however, could not be replicated with respect to psychological well-being where no statistically significant improvement overall was reported. Altogether, the results indicate that CBT treatment offered to the participants of the current study had some positive impact on generalized emotional distress and overall quality of life but limited effect on post-traumatic stress symptoms and sense of overall well-being. Findings regarding clinically significant change further suggest that treatment enabled clients to achieve symptom levels within the normal range if their symptoms were less severe initially. Further analyses demonstrated that the clinically significant group had significantly higher levels of absolute symptom reduction than the other clients. This suggests that CBT as delivered to these clients was not sufficient to meet the needs of more severely distressed war survivors, and that adapted approaches to CBT (Cook, Schnurr, & Foa, 2004) or alternate approaches to therapy (Miller, 1999) may be needed for war survivors with more severe long-term symptoms. On the other hand, the subgroup that achieved clinically significant change did not differ from the remaining participants on their initial levels of quality of life. This finding demonstrates that CBT treatment was associated with marked improve-

Table 4. Levels of depression, post-traumatic stress reactions, quality of life and well-being

<table>
<thead>
<tr>
<th></th>
<th>Participants classified as significantly improved (n = 24)*</th>
<th>Participants labelled as non-significantly improved (n = 43)</th>
<th>Statistics</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time 1 scores</td>
<td></td>
<td></td>
<td>t</td>
<td></td>
</tr>
<tr>
<td>BDI</td>
<td>25.47 (9.66)</td>
<td>32.42 (8.52)</td>
<td>-2.86</td>
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<tr>
<td>PDS</td>
<td>21.75 (10.97)</td>
<td>29.00 (13.55)</td>
<td>-2.29</td>
<td>0.026</td>
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<tr>
<td>BSI</td>
<td>25.14 (14.74)</td>
<td>37.33 (15.59)</td>
<td>-2.83</td>
<td>0.007</td>
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<td>MANSA</td>
<td>40.71 (10.98)</td>
<td>40.13 (13.11)</td>
<td>0.19</td>
<td>0.849</td>
</tr>
<tr>
<td>PWBS</td>
<td>65.47 (11.32)</td>
<td>62.30 (9.76)</td>
<td>1.07</td>
<td>0.289</td>
</tr>
<tr>
<td>Time 2–Time 1 change scores</td>
<td></td>
<td></td>
<td>t</td>
<td></td>
</tr>
<tr>
<td>BDI</td>
<td>-18.26 (9.26)</td>
<td>3.74 (16.00)</td>
<td>5.89</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>PDS</td>
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<td>3.61 (15.71)</td>
<td>2.15</td>
<td>0.036</td>
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<tr>
<td>BSI</td>
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<td>12.50 (16.01)</td>
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<td>&lt;0.001</td>
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<tr>
<td>MANSA</td>
<td>15.71 (12.61)</td>
<td>6.92 (13.97)</td>
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<td>0.020</td>
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<tr>
<td>PWBS</td>
<td>4.85 (10.45)</td>
<td>0.41 (15.17)</td>
<td>1.16</td>
<td>0.251</td>
</tr>
</tbody>
</table>

*Classified as having achieved clinically significant change based upon improvement on the BDI or BSI to within one standard deviation of non-clinical Mean scores and positive change on the MANSA. BDI = Beck Depression Inventory. BSI = Brief Symptom Inventory. MANSA = Manchester Short Assessment of Quality of Life. PDS = Posttraumatic Stress Diagnostic Scale. PWBS = Psychological Well Being Scale.
ment (a more than 20% increase) in quality of life for a subset of civilian war survivors. The fact that this subgroup had less severe initial symptoms suggests that CBT is best able to enhance quality of life for persons who are less severely distressed than those who are more severely distressed. Therefore, quality of life should be considered separately as a goal and outcome for civilian war survivors (Besser & Neria, 2009). For those with more severe symptoms, either more intensive therapy to resolve PTSD or alternate (e.g., community based; Miller, 1999) interventions designed to specifically enhance social support or personal efficacy may be necessary in order to improve quality of life.

The current study, however, cannot determine why the clients reported reduced symptoms of depression at follow-up despite no such improvement related to symptoms of PTSD. With regard to depression one might assume that the realization of their own ability to work on symptoms of distress as well as the opportunity to share suffering with the therapist might have led to the improvement of depressive symptoms and in perceived quality of life. Recovery from war trauma has been hypothesized to require not only resolution of post-traumatic stress, but also a reduction in the war-related loss or change of meaningful structure and activity in daily life and social roles (Miller, 1999). Research is needed to determine whether these interpersonal factors, which are known to be fundamental contributors to depression and recovery from depression, may mediate or serve as mechanisms of change in CBT with war survivors. Also, the hypothesized additional benefit of community based interventions designed explicitly to restore a sense of personal efficacy and communal involvement warrants evaluation (Miller, 1999).

In line with this argument, it is possible that the symptoms of PTSD might require more consistent focused psychotherapeutic involvement than was achieved by most of the present study’s participants. Both the cognitive/emotional processing and the trauma narrative or therapeutic exposure aspects of CBT for PTSD require consistent sustained therapy, particularly with severely traumatized and chronically affected persons (Cook et al., 2004; Resick, Nishith, & Griffin, 2003). The relatively infrequent treatment attendance (i.e., on average, just over once monthly) reported by participants, with a few exceptions, would not be likely to be a sufficient ‘dose’ to enable them to resolve PTSD symptoms. Chronic PTSD tends to be relatively stable and unremitting unless an adequate dose of an evidence-based approach to treatment such as CBT is received (Resick et al., 2003). Given the common reluctance to engage in clinic-based therapy by displaced persons, another important clinical research question is whether potentially more acceptable community based interventions could provide sufficient ongoing social support and experiences of self-efficacy to counteract PTSD symptoms. This is particularly important in settings such as the present study in Kosovar society, in which there is a lack of adherence to fixed appointments due to cultural and financial reasons. It also is important to determine if clinic-based treatment can be effective for PTSD and personal well-being if adherence to fixed appointments is required but resources are provided to enhance attendance (e.g., providing transportation, offsetting the cost of travel and lost work, having therapists come to local sites to deliver treatment and adapting treatment to cultural norms to reduce potential stigma).

The current study has several limitations. There was no measurement of inter-rater reliability with respect to the MINI. Furthermore, without pre-war assessment of psychiatric disorders, one cannot evaluate whether some of the clients had psychiatric disorders prior to the war. Nevertheless, study findings suggest that civilian war survivors with extensive histories of multiple exposure to war-related and post-war traumatic stressors may still be in need of—and in many cases, able to benefit from—therapeutic treatment to address psychological symptoms and enhance their quality of life a decade or more after the conclusion of war. Survivors of war seeking treatment many years after the war may however require adaptations to evidence-based treatments based on their culture and life circumstances in order to both recover from PTSD and experience general emotional relief.

REFERENCES


