

## Review Article

# Do Late, Low-level Interventions Improve Chronic War Trauma Related Symptoms?

Amila Lazic and Thomas Wenzel\*

WPA Scientific Section on Primary Health Care, Austria

\*Corresponding author: Thomas Wenzel, Medical University of Vienna, Austria

Received: November 08, 2023; Accepted: November 15, 2023; Published: November 17, 2023

## Introduction

In the last decades, multiple wars with long term social, economic, and psychological consequences have challenged health care systems both in countries of origin and in host countries, with vast groups of survivors living as internally or internationally displaced persons, as refugees from their homes. Those who stay or cannot escape to the often not much more stable third country environments face health care infrastructures and ongoing challenges. Many are distressed from events or health care deficits (see the WHO mental health GAP model), encountered already before the war and aggravated by brain drain, persecution, massacres and multiple barriers facing them in health care services [1-3]. The high rate of posttraumatic stress and other trauma-spectrum disorders [4,5], including unspecific reactions, such as severe depressive episodes with increased suicidal ideation [6], further challenge post-war mental health services. Different challenges can be observed in host countries [7,8], even in those with a high level of health care services, when refugees with different language and cultural background, often living far from specialized service institutions, and with no means to afford such services would urgently require them. Untreated trauma spectrum disorders tend to become chronic and might lead to indirect and transgenerational trauma disorders [6,9,10].

In recent decades, many international organizations such as UNHCR, WHO, UNICEF and Interagency standing committees have spearheaded and promoted the use of MHPSS (mental health and psychosocial services) models [11-13]. They address this low-resource situations, characterized by the presence of often only less than 5 fully trained mental health experts such as Psychiatrists and Psychotherapists, that are in turn also available to only a limited group of patients in each country. The MHPSS model includes therefore also the building of community based and less expert-oriented services provided by helpers with different professional backgrounds or expertise, but no or very limited training in Psychology, Psychiatry, or Psychotherapy.

Psychoeducation in regard to mental health and trauma related reactions or disorders has frequently become an important component in such programs [14-18] as it appears to require no extensive training of trainers or professional experience of service providers. It is used either as the main or only intervention or as additional offer (adjunct

therapy) in addition to more complex validated approaches such as Eye-movement Desensitization (EMDR) [19,20] or trauma-focused forms of traditional Psychotherapy.

Still, in recent years few studies have evaluated this type of intervention, that could be seen as a good and efficient approach to alleviate the suffering of larger population groups suffering from the impact of large-scale violence and also other catastrophic events.

A special challenge will be neglected groups at a time when the collective trauma, in our example, the war in former Yugoslavia, has been nearly forgotten in the public discourse, while the psychological impact and resulting symptoms in survivors will last [21-23], even when some treatment has been provided before. Many survivors have been displaced to European host countries, with a different cultural environment, after being exposed to a genocidal environment in their homes. A number of studies have documented psychological sequels, including Posttraumatic Stress Disorder (PTSD) and depressive symptoms shortly after the war [24-26], but limited research has been done on the long term sequels and their treatment still persisting today.

In our study, that is part of a science teaching project, we therefore aim to evaluate the impact of psychoeducation, provided by trained experts, in a naturalistic setting with survivors of a genocidal war ("Ethnic cleansing"), still suffering from by then, at this later stage, chronic symptoms, years after escaping their traumatic environment, while living in relative safety.

Due to the large data pool elicited in the different measurement points, we focus on data on the most relevant general mental health indicators, BDI and GHQ scores, while further data will be published separately.

## Method

We used networks of the ethnic Bosnian survivors in the two probably most important host countries, Austria and Germany, to recruit participants in a convenience sample of survivors still seeking treatment for persisting symptoms, even after earlier treatment, who had received medication or Psychotherapy earlier without satisfactory subjective improvement. All participants were offered Cognitive Behavior Therapy (CBT) based psychoeducation by Psychotherapists from their own ethnic group, language and culture. The intervention

was based on the German language standard manual for CBT-based psychoeducation (as published by Liedl, Schäfer und Knaevelsrud (2013) [27]). A second group, with random assignment, who received only general supportive conversations on a regular basis, in equal frequency and length as the intervention group, was used as control group.

**Aims**

We conducted the research to evaluate the zero-hypothesis, that no benefit would be obtained by CBT based psychoeducation in the defined group, and further, if there was a gender difference in this regard. A secondary aim was to evaluate present psychological status, quality of life, and possible long term sequels present even in a safe and supportive environment, with earlier access to medical or psychotherapeutic treatment. A further question was, if the environment, -which means living in Austria or in Germany with different health care systems, - would be reflected in different baseline values or intervention outcomes.

We evaluated both specific, PTBS related, and unspecific symptoms such as depression, using standard instruments, as listed below, at baseline T1, and at conclusion of the intervention (T2). In this publication we focus on the general health and depression scores of this study as the most relevant indicators.

Inclusion criteria were that participants had to be survivors of the ethnic cleansing in Bosnia-Herzegowina, in an age range between 40-70 years, who had no history of earlier psychotic episodes or of other Psychiatric or medical disorders potentially interfering with memory or participation in the study. Informed consent was taken by all participants, and an ethics votum by the University supervising the research was obtained (06.07.2022, Sigmund Freud University ECBV77MDBAU66L89496). Further we selected only participants suffering from PTSD symptoms, based on standard cut-off scores in standard questionnaires (HTQ) [28,29], or depression (BDI) (Table 1).

**Sample**

The sample included a nearly equal number of female and male participants with an average age of 52,61 Jahren (*SD*=6,63), and an age range between 40 and 70 years. The majority (85%) had a primary or second level education.

**Instruments**

The Beck-Depressions-Inventar (BDI) is the probably most common specific instrument to evaluate depression, validated successfully in many languages [30-32].

The General Health Questionnaire (GHQ-28) is the most frequently used general screening questionnaire for a broader range of symptoms, and also to identify those in need of mental health related treatment (Table 2) [33-35].

All questionnaires were applied in earlier validated mother-language (Bosnian or Croatian) versions.

The HTQ yielded an average of 15 reported potentially traumatic events in Austria, and 11 in Germany, which might indicate that at

least in our sample, Austrian participants had been more severely exposed during the war.

**Results**

Again preliminary statistical analysis gave at a first impression that of a highly significant improvement only in the intervention group (at  $t(31)=3.636$  and  $p<.001$ ), while further analysis yielded no significant difference between both groups, (at  $t(62)=0.104$  und  $p=.917$ ). At  $F(2)=0.957$  and  $p=3.87$  no significant interaction between measurement points, experimental and control group membership.

At  $F(2)=0.355$  and  $p=.703$ , no significant gender difference between intervention and control group was observed at T2 (outcome) in GHQ scores (Tables 3 and 4).

**Table 1:** Values for depression, PTSD symptoms, number of events and quality of life, elicited to assess inclusion criteria in psychopathology scores, number of events.

	Germany (n=32)		Austria (n=32)	
	M	SD	M	SD
BDI	14.78	10.95	17.62	9.19
GHQ28	35.22	10.08	36.12	8.87
HTQ	52.84	31.30	60.22	26.85
WHOQOL	71.41	15.38	66.72	14.30

**Table 2:** Baseline reassessment, using t-test for independent variables. No significant differences between groups.

	Experimental gruppe		Kontroll gruppe		t	p	95% KI	
	M	SD	M	SD				
BDI	18.38	11.37	14.03	8.35	1.742	.087	-0.640	9.328
GHQ28	37.16	9.35	34.19	9.42	1.265	.211	-1.722	7.660
HTQ	62.00	30.75	51.06	26.86	1.515	.135	-3.492	25.367
WHOQOL	67.53	15.94	70.59	13.91	-0.819	.416	-10.538	4.413

**Table 3:** Descriptive statistics of the intervention on BDI depression scores in intervention as compared to the control group.

	M	SD
Intervention Group		
T BDI 1	18.38	11.37
T BDI 2	13.94	11.52
Control Group		
T BDI 1	14.03	8.349
T BDI 2	13.91	7.880

Results were analysed using correction Greenhouse-Geisser after primary statistical analysis, and yielded  $\eta^2=.071$ , at  $F(2)=4.761$  and  $p=.013$ , indicating a moderate intervention effect of CBT psychoeducation as compared with the control group.

**Table 4:** Descriptive statistics of the intervention on GHQ summary scores in intervention as compared to the control group.

	M	SD
Intervention group		
T 1 GHQ28	37.16	9.35
T 2 GHQ28	33.00	9.97
Control group		
T1 GHQ28	34.19	9.42
T2 GHQ28	32.75	9.17

## Discussion and Limitations

While our results indicate a possible positive effect of a structured low level (CBT psychoeducation) intervention in participants suffering from depression after exposure to war related events on symptoms of depression, general mental health indicators as measured by the General Health Questionnaire overall score, did not improve in the intervention group as compared to an attention only (conversation) control group. No significant difference was found regarding this observation between female and male participants.

In addition, our results confirm that long term symptoms might be not improved by the protection given by a safe environment and access to health care. The high level exposure and symptom levels of at least some groups of refugees living in Germany and Austria still would require specialist treatment. This cannot be replaced by low-level interventions, as offered in the psychoeducation model, and probably similar low-level interventions in the MHPSS model, even if they are culture and language sensitive and provided by trained helpers from their own ethnic and language group.

It can on the other hand not be excluded that displacement in a foreign culture and language environment, despite large communities from the country of origin being available in both host countries, might contribute to this problem. This is a limitation of our study, in addition to the convenience sample approach dictated by the naturalistic setting of treatment seeking general population members, and the selection of a common group present as refugees in many countries. Further, participants had received different types of earlier treatment, and do not constitute a strictly homogenous group, which still can be seen as a typical situation in most countries, as highly specific treatment centers for war victims are not always available to most survivors, even in high-economy host countries.

## Conclusions

Besides the obvious conclusion that further research in the long-term effect and treatment needs of war survivors with larger samples is urgently needed to identify both mental health needs and effective but affordable, low-barriers interventions, further conclusions can be drawn. Our data, while being based on a pilot study with limited resources, indicate that low-level but standardized interventions such as psychoeducation might only have a limited positive impact on specific, like on depression related symptoms, if at all. This could be provided by trained general health care professionals, such as nurses that provide a large part of the services in many countries, have a high rate of acceptance, and lower barriers to their patients than the few psychotherapists or psychiatrists living in faraway capitals. Results also indicate that specialized professional services to address long term sequels are still required and should not be neglected, also due to the suffering and considerations as a secondary and maybe even transgenerational effect of severe violence-related trauma.

We are grateful to Prof. Dr. Omar Gelo, Vienna for his statistical supervision.

## References

1. Mattson S (1993) Mental health of Southeast Asian refugee women: an overview. *Health Care Women Int* 14: 155-165.

2. Karmi G (1992) Refugee health. *BMJ* 305: 205-206.
3. The world's refugee populations. *Popul News* 51: 1-8.
4. Hecker T, Huber S, Maier T, Maercker A (2018) Differential Associations among PTSD and Complex PTSD Symptoms and Traumatic Experiences and Postmigration Difficulties in a Culturally Diverse Refugee Sample. *J Trauma Stress* 31: 795-804. [[crossref](#)]
5. Vinson GA, Chang Z (2012) PTSD symptom structure among West African war trauma survivors living in African refugee camps: a factor-analytic investigation. *J Trauma Stress* 25: 226-231. [[crossref](#)]
6. Wenzel T, Rushiti F, Aghani F, Diaconu G, Maxhuni B, et al. (2009) Suicidal ideation, post-traumatic stress and suicide statistics in Kosovo. An analysis five years after the war. *Suicidal ideation in Kosovo. Torture* 19: 238-247. [[crossref](#)]
7. Refugee Problems in Shanghai. *Br Med J* 2: 983.
8. Refugee health in Iowa. *Iowa Med* 77: 354-355.
9. Kizilhan JI, Berger T, Sennhauser L, Wenzel T (2023) The psychological impact of genocide on the Yazidis. *Front Psychol* 14: 1074283. [[crossref](#)]
10. Kizilhan JI, Noll-Hussong M, Wenzel T (2021) Transgenerational Transmission of Trauma across Three Generations of Alevi Kurds. *Int J Environ Res Public Health* 19: 81. [[crossref](#)]
11. Marshall C (2022) The inter-agency standing committee (IASC) guidelines on mental health and psychosocial support (MHPSS) in emergency settings: a critique. *Int Rev Psychiatry* 34: 604-612.
12. Duckers M, van Hoof W, Willems A, Te Brake H (2022) Appraising Evidence-Based Mental Health and Psychosocial Support (MHPSS) Guidelines-PART II: A Content Analysis with Implications for Disaster Risk Reduction. *Int J Environ Res Public Health* 19: 7798. [[crossref](#)]
13. Te Brake H, Willems A, Steen C, Duckers M (2022) Appraising Evidence-Based Mental Health and Psychosocial Support (MHPSS) Guidelines-PART I: A Systematic Review on Methodological Quality Using AGREE-HS. *Int J Environ Res Public Health* 19: 3107. [[crossref](#)]
14. Wiechers M, Strupf M, Bajbouj M, Boge K, Karnouk C, et al. (2023) Empowerment group therapy for refugees with affective disorders: results of a multicenter randomized controlled trial. *Eur Psychiatry* 66: e64. [[crossref](#)]
15. Kananian S, Kip A, Schumm H, Giesebrecht J, Nicolai A, et al. (2022) Culturally adapted cognitive behavioural group therapy for mental disorders in refugees plus problem solving training (ReTreat): study protocol for a multicentre randomised controlled trial. *BMJ Open* 12: e061274. [[crossref](#)]
16. Spanhel K, Schweizer JS, Wirsching D, Lehr D, Baumeister H, et al. (2019) Cultural adaptation of internet interventions for refugees: Results from a user experience study in Germany. *Internet Interv* 18: 100252. [[crossref](#)]
17. Carlsson J, Sonne C, Vindbjerg E, Mortensen EL (2018) Stress management versus cognitive restructuring in trauma-affected refugees-A pragmatic randomised study. *Psychiatry Res* 266: 116-123. [[crossref](#)]
18. Mohlen H, Parzer P, Resch F, Brunner R (2005) Psychosocial support for war-traumatized child and adolescent refugees: evaluation of a short-term treatment program. *Aust N Z J Psychiatry* 39: 81-87. [[crossref](#)]
19. Yurtsever A, Konuk E, Akyuz T, Zat Z, Tukul F, et al. (2018) An Eye Movement Desensitization and Reprocessing (EMDR) Group Intervention for Syrian Refugees With Post-traumatic Stress Symptoms: Results of a Randomized Controlled Trial. *Front Psychol* 9: 493. [[crossref](#)]
20. Acarturk C, Konuk E, Cetinkaya M, Senay I, Sijbrandij M, et al. (2015) EMDR for Syrian refugees with posttraumatic stress disorder symptoms: results of a pilot randomized controlled trial. *Eur J Psychotraumatol* 6: 27414. [[crossref](#)]
21. Bogic M, Ajdukovic D, Bremner S, Franciskovic T, Galeazzi GM, et al. (2012) Factors associated with mental disorders in long-settled war refugees: refugees from the former Yugoslavia in Germany, Italy and the UK. *Br J Psychiatry* 200: 216-223. [[crossref](#)]
22. Priebe S, Matanov A, Jankovic Gavrilo J, McCrone P, Ljubotina D, et al. (2009) Consequences of untreated posttraumatic stress disorder following war in former Yugoslavia: morbidity, subjective quality of life, and care costs. *Croat Med J* 50: 465-475. [[crossref](#)]

23. Basoglu M, Livanou M, Crnobaric C, Franciskovic T, Suljic E, et al. (2005) Psychiatric and cognitive effects of war in former yugoslavia: association of lack of redress for trauma and posttraumatic stress reactions. *JAMA* 294: 580-590. [[crossref](#)]
24. Jensen SB (1996) Mental health under war conditions during the 1991-1995 war in the former Yugoslavia. *World Health Stat Q* 49: 213-217. [[crossref](#)]
25. Nelson BD, Fernandez WG, Galea S, Sisco S, Dierberg K, et al. (2004) War-related psychological sequelae among emergency department patients in the former Republic of Yugoslavia. *BMC Med* 2: 22. [[crossref](#)]
26. Nickerson A, Priebe S, Bryant RA, Morina N (2014) Mechanisms of psychological distress following war in the former Yugoslavia: the role of interpersonal sensitivity. *PLoS One* 9: e90503. [[crossref](#)]
27. Liedl AS, U Knaevelsrud, C Psychoedukation bei posttraumatischen Störungen: Schattauer; 2013.
28. Patel AR, Newman E, Richardson J (2022) A pilot study adapting and validating the Harvard Trauma Questionnaire (HTQ) and PTSD checklist-5 (PCL-5) with Indian women from slums reporting gender-based violence. *BMC Womens Health* 22: 22. [[crossref](#)]
29. Berthold SM, Mollica RF, Silove D, Tay AK, Lavelle J, et al. (2019) The HTQ-5: revision of the Harvard Trauma Questionnaire for measuring torture, trauma and DSM-5 PTSD symptoms in refugee populations. *Eur J Public Health* 29: 468-474. [[crossref](#)]
30. Bouman TK, Kok AR (1987) Homogeneity of Beck's Depression Inventory (BDI): applying Rasch analysis in conceptual exploration. *Acta Psychiatr Scand* 76: 568-573. [[crossref](#)]
31. Campbell IM, Burgess PM, Finch SJ (1984) A factorial analysis of BDI scores. *J Clin Psychol* 40: 992-996.
32. Maggi G, D'Iorio A, Aiello EN, Poletti B, Ticozzi N, et al. (2023) Psychometrics and diagnostics of the Italian version of the Beck Depression Inventory-II (BDI-II) in Parkinson's disease. *Neurol Sci* 44: 1607-1612. [[crossref](#)]
33. Yunusa MA, Obembe A (2013) Prevalence of psychiatric morbidity using GHQ-28 among cleft lip patients in Sokoto. *Ann Afr Med* 12: 135-139. [[crossref](#)]
34. Sterling M (2011) General Health Questionnaire - 28 (GHQ-28). *J Physiother* 57: 259. [[crossref](#)]
35. Willmott SA, Boardman JA, Henshaw CA, Jones PW (2004) Understanding General Health Questionnaire (GHQ-28) score and its threshold. *Soc Psychiatry Psychiatr Epidemiol* 39: 613-617. [[crossref](#)]

**Citation:**

Lazic A, Wenzel T (2023) Do Late, Low-level Interventions Improve Chronic War Trauma Related Symptoms? *ARCH Women Health Care* Volume 6(4): 1-4.