

SCL-90-R and Suicide Ideation in Torture and War Survivors Receiving Psychotherapy

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Abstract

Objectives: Torture survivors suffer psychosocial distress such as posttraumatic stress disorder (PTSD) and depression. Patients with PTSD and depression have increased risk for suicidal behavior. The aim of this study is to identify those torture and war survivors who have suicidal thoughts and describe their psychological profile as assessed in SCL-90-R. The patients of the Swiss Red Cross Centre for Torture Victims receiving psychotherapy were monitored with the SCL-90-R (N=58).

Results: Out of 56 patients 32 (57%) declared that they did not suffer under the thought to end their own life (0=not at all), 10 (18%) indicated that they suffered substantially (scale value 3) or extremely (4) while 14 (25%) suffered somehow (1, 2). The endorsement of the suicide ideation correlates highly with all SCL-90-R scales, particularly with the scale Depression and PTSD indicating that the patients with suicide ideation also show considerable psychopathology. The scale Depression explained 40% of the variance of the suicide thoughts item and the scale Anger-hostility added another 5%. **Conclusion:** Suicide prevention should be an important part of the treatment and care in dealing with war and torture survivors.

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Introduction

Torture survivors are known to suffer substantial sequelae and psychosocial distress [1-3]. The well-documented diagnoses are posttraumatic stress disorder (PTSD) and depression. It has further been reported that patients with PTSD and patients with depression have increased risk for suicidal behavior [4-6].

In one of the studies dealing with suicidal behavior and PTSD comorbidity with depression Oquendo and colleagues [7] found that patients with PTSD and depression had higher risk for suicide. Consistent with the findings of Marshall and coworkers [8] the authors found that suicidal ideation was most severe in the depressed patients who had current PTSD and, therefore, more symptoms, suggesting that suicidal ideation lessens in major depressive episodes once PTSD subsides.

Additionally, association between suicidal behavior and aggressivity has been reported in borderline personality disorder [9,10] and major depression [11,12]. Higher levels of aggression, including autoaggression, have been reported in PTSD patients [13-16].

Further studies of the risk of suicidal behavior in patients with diagnoses of both PTSD and major depressive episode [17-19] suggest a synergistic effect on suicidal behavior.

It is important to realize that one suicide attempt is not an end in itself but it often is followed by additional suicide attempts and sometimes by a completed suicide. Therefore, once attempting a suicide there is a high probability of repeating the attempt or committing a suicide. In The Netherlands at least 11% of patients treated in general hospitals following suicide attempts make repeat attempts within one year [20]. In the UK, figures of 12-25% have been reported [21]. At least 40% of all suicide attempters seen in general hospitals report previous suicide attempts [22]. Also repetition of attempts is strongly associated with the risk of eventual suicide [23-25].

As suicide thoughts and suicidality are urgent and life-threatening issues they should be attended to with high priority in the mental health treatment of the

war and torture survivors. Thus, the aim of this study is to identify those torture and war survivors who have suicidal thoughts and indicate their psychological profile as assessed in SCL-90R, in particular the extent of PTSD and depression.

Method

Subjects

The study participants consisted of the Swiss Red Cross Centre for Torture Victims patients (N=80) receiving psychotherapy. They were monitored with the SCL-90-R as a part of the assessment procedure performed by psychotherapists in an early phase of the therapy, though for various reasons it was not possible to obtain a filled check list from everyone, but from 58 patients. The center offers a wide range of outpatient therapies for victims of torture and also provides training for health personnel [26]. The SCL-90-R was presented either in the native language of the patient or in a language the patient felt most comfortable. The patients were in their majority from Bosnia-Herzegovina or Kurds from Turkey (table 1), two third were male and in average they were 37 years old. Two thirds of the patients had one or more children, lived with their families and often received post secondary education (Two thirds of the patients had one or more children, lived with their families and often received more than 8 years of schooling). As they were recognized refugees they spent on average 2-3 years in Switzerland before being referred to the Centre. There were no substantial differences between those patients who did fill in the SCL-90-R and those who did not except for a trend in gender (59% males in the groups of patients without the SCL-90-R vs. 91% males in the group with SCL-90-R) (table 2).

Instruments

The SCL-90-R is an established instrument for monitoring psychological distress of the patients, as well as of war and torture survivors [27], and provides scores on 9 primary symptom dimensions (somatization, obsessive-compulsive, interpersonal sensitivity, depression, anxiety, hostility, phobic anxiety, paranoid ideation, psychoticism) Table 12 and on 3 global indices (global severity index, positive distress index, positive symptom total) [28-30] as well as on the 25 items scale of PTSD [31]. The self-administered questionnaire

Table 1. Countries of origin of the war and torture victims

n (58)		
Country of origin		
Iran	2	3.4
Iraq	2	3.4
Swiss (abroad)	2	3.4
Turkey	26	44.8
Yugoslavia	7	12.1
Bosnia	17	29.3
missing	2	3.4

consists of 90 items assessed on Likert like scale (0=not at all, 4=extremely). The item 15 asks for assessment of the statement 'How much were you disturbed in last 7 days by thoughts to end your life'. We assume that, while this statement might not differentiate between those who did not have any thought about ending their life and those who had this thought, but found it agreeable, it is a good indicator of suicide ideation in an important stage of suicide risk when it still is disturbing and could be attended to.

Statistical Analysis

The data were processed and the descriptive statistics and the regression analysis were performed using the PC version of the SPSS 10.0 software.

Results

Out of 56 patients 32 (57%) declared that they did not suffer under the thought to end their own life (0=not at all), 10 (18%) indicated that they suffered substantially (scale value 3) or extremely (4) while 14 (25%) suffered somehow (1, 2). Males and females did not differ in their endorsement of suicide ideation (12 males (medium (2), substantially (3), extremely (4)) and 3 females, both representing 27% of their group). Those torture survivors who suffered under thoughts to end their life were in average the same age as those who did not (mean 37.6 vs. 36.9 years (stddev 6.2 vs. 6.0)). Both groups immigrated to Switzerland in average in the same year (mean=1992, stddev=2.5 vs. 2.7).

The endorsement of the suicide ideation item correlates highly with all SCL-90-R scales, particularly with the scale Depression and PTSD indicating that the patients with suicide ideation also show considerable psychopathology (table 3). It also correlates substantially with the SCL-90-R items: 'Thought that something is wrong with my mind' (item 90), 'Thought on death and dying' (59), 'Desire to break things' (67), 'Fear of fainting' (82), 'Hopelessness' (54), 'Thought of being punished for sins' (85) (table 4). To answer the question which SCL-90-R scale best predicts the suicide ideation in explaining the largest part of its variance the variable 'Thought to end my life' was entered in the stepwise multiple regression as a dependent variable and the SCL-90-R scales as independent variables. As expected the scale Depression explained a high proportion (40%) of the variance and the scale Anger-hostility added another 5% (table 5). Entering the individual SCL-90-R items into the stepwise multiple regression as independent variables ('Thought to end my life' as dependent variable) we found that the item 'The thought that I should be punished for my sins' explained 56% of the variance of the suicide ideation item. The following 4 items added another 30% to the explanation of the variance of the dependent variable ('The inclination to get into explaining and arguing', 'Difficulties in falling asleep', 'Lack of appetite' and 'Fear when leaving home alone') (table 6).

Table 2. Characteristics of the patients included in the study (SCL-90-R administered) and those who were excluded from the study (no SCL-90-R)

	no SCL-90-R		SCL-90-R			
	(N=22)		(N=58)			
	mean	std dev	mean	std dev	t	p
Age	40	11.43	37.2	6.24	1.06	0.301
Year of immigration	91.1	9.1	92.5	2.6	-0.69	0.497
	no SCL-90-R	SCL-90-R				
	n	% (N=22)	n	%(N=58)		
Gender *						
male	13	59.1	47	81		
female	9	40.9	11	19		
Marital status						
single	5	22.7	13	22.4		
married	12	54.5	38	65.5		
widowed / divorced	5	22.7	7	12		
Children						
yes	13	59.1	39	69.6		
Family in Switzerland						
yes	15	58.2	46	79.3		
Education (years of schooling)						
median	8		8			
Further education (in years)						
median	4		3			
Unemployed						
yes	15	68.2	43	74.1		
* Yates corrected Chi-square=3.01, df=1, p=0.08						
		no SCL-90-R		SCL-90-R		
		(N=22)		(N=58)		
	n	% (N=22)	n	%(N=58)		
referral						
self	5	22.7	15	25.9		
charity	6	27.3	30	51.7		
practitioner	4	18.2	6	10.3		
psychiatric						
institution	4	18.2	3	5.2		
looked after by charity institution						
yes	11	50	45	77.6		

Table 3. Correlation of 'Thoughts to end my life' (SCL-90-R15) with SCL-90-R scales

Scales	SCL15: Thoughts to end my life
	r
Somatizing	.344**
Obsessive-compulsive	.508**
Interpersonal	
sensitive	.505**
Depression	.644**
Anxiety	.573**
Anger-hostility	.598**
Phobic anxiety	.579**
Paranoid ideation	.480**
Psychoticism	.590**
PTSD	.637**

** p < .01 (2-tailed)

Table 5. Stepwise multiple regression; dependent variable: 'Thoughts to end my life' (SCL-90-R15), independent variables: SCL-90-R scales

SCL-90-R scales	Multiple R	Adjusted R square	Beta	p
1 Depression	0.644	0.404	0.443	0.001
2 Anger-hostility	0.688	0.454	0.315	0.018

Table 4. Correlation of 'Thoughts to end my life' (SCL15) with SCL-90-R items ($r > 0.40$)

SCL-90-R items	r
(13) Fear of open places	.535
(14) Lack of energy, slow	.488
(16) Hearing voices	.473
(17) Shaking	.503
(18) I cannot trust others	.421
(23) Startled without reason	.438
(24) Eruption of feelings	.477
(25) Fear of leaving home	.423
(33) Fearful	.522
(43) Others observing you	.495
(51) Emptiness	.429
(54) Hopelessness	.584
(55) Concentration difficulties	.419
(61) Not feeling well when observed	.513
(62) Having someone else's thoughts	.444
(67) Desire to break things	.629
(69) Feeling embarrassed when with others	.475
(70) Avoiding masses	.489
(72) Startle and panic fits	.548
(79) Feeling worthless	.544
(81) Desire to scream and throw things	.451
(82) Fear of fainting	.588
(85) Thought of being punished for sins	.554
(86) Startling thoughts	.435
(90) Thought that something is wrong with your mind	.635

all $p < 0.01$ (two tailed)

Table 6. Stepwise multiple regression; dependent variable: 'Thoughts to end my life' (SCL-90-R15), independent variables: SCL-90-R items

SCL-90-R Items:	Multiple R	Adjusted R square	Beta	p
(85) The thoughts that I should be punished for my sins	0.760	0.559	0.761	0.0000
(74) The inclination to get into explaining and arguing	0.867	0.727	0.401	0.0001
(44) Difficulties in falling asleep	0.909	0.801	0.311	0.0149
(19) Lack of appetite	0.930	0.837	0.210	0.0149
(25) Fear when leaving home alone	0.947	0.869	-0.250	0.0298

Table 7. Stepwise multiple regression; dependent variable 'Thought I should be punished for my sins' (SCL85), independent variables SCL-90-R items

	Multiple R	Adjusted R square	Beta	p
(15) Thought to end my life	0.760	0.559	0.813	0.0000
(33) Fearful	0.832	0.663	0.349	0.0005
(74) The inclination to get into explaining and arguing	0.884	0.748	-0.469	.0000
(02) Nervousness	0.925	0.824	-0.384	0.0001
(25) Fear when leaving home alone	0.963	0.908	0.351	0.0004

The item 'I should be punished for my sins' is best explained by 'Thought to end my life' (explaining 56% of the variance), 'Fearfulness' (additional 10%) and 'The inclination to get into explaining and arguing', 'Nervousness', and 'Fear when leaving home alone' explaining another 25% of the variance (table 7).

The item 'Inclination to get into explaining and arguing' (74) is best predicted by 'Desire to break things' (64) and 'I have to worry a lot' (31) explaining together 57% of the variance of the dependent variable (table 8). The dependent variable 'Difficulties falling asleep' (44) is best accounted for by 'Nervousness' (02) (explaining 47%) and by 'Stomach troubles' (40), 'Feeling uncomfortable when with others' (69), 'Desire to overeat' (60), 'Depression' (30), 'Self blame' (26), 'Memory difficulties' (9) and 'Emptiness' (51), all adding another 48% to the explanation of the variance of the dependent variable (table 9).

The variable 'Lack of appetite' relevant for the suicide ideation is best explained by 'Back pain' (27) (35%) and 'Feeling I should worry a lot' (31) (explaining additional 20%). The items 'Hot and cold waves', 'Fear of being caught', 'Headache', 'Compulsive repetition of actions', 'Others know my thoughts', 'Angry and irritated', 'Shaking', 'Decreased interest in sex' and 'Difficulties in breathing' account for additional 43% of the variance of the dependent variable 'Lack of appetite' (table 10). Finally, computing the stepwise multiple regression with the dependent variable 'Fear to leave home alone' which accounts for a significant amount of the variance of suicide ideation, and the SCL-90-R items as independent variables we found that the item 'Sudden startle without reason' (23) explains 44% of the variance of the dependent variable. The item 'Avoiding places and activities because startle' explains additional 17% of the variance of the dependent variable. The three items 'Difficulties in concentration', 'Difficulties in falling asleep' and 'Compulsive repetition of action' account for additional 20% of the variance of the item 'Fear to leave home alone' which has been found relevant for suicide ideation (table 11, Table 12).

Analyzing how much the individual items of each scale account for the variance of the item 'Thoughts to end my life' we computed a series of stepwise multiple regressions entering suicide ideation

as dependent and the items of each scale as independent variables.

In the scale Somatization the item 'Heart and chest pain' explained the highest amount of variance of the item 'Thoughts to end my life'. The item 'Emptiness in my head' accounted for the largest part of the dependent variable explained by the items of the scale Obsessive-compulsive. Among the items of the scale Interpersonal sensitivity the item 'Feeling uneasy when observed' explained about 23% of the variance. Out of the three items of the scale Depression significantly accounting for the variance of the dependent variable the item 'Hopelessness' was the most important one.

The best explanation within the scale Anxiety provided the item 'Startle and panic fits'. The item 'Desire to break things' contributed most to the explained variance by the items of the scale 'Hostility'. The scale Phobic anxiety was best represented by the item 'Fear of fainting', while the item 'Others are observing me' had the best predictive power among the items of the scale Paranoid ideation.

The item 'Thoughts of being punished' explained the most variance when the items of the scale Psychoticism were entered and the item 'Thoughts about death and dying' explained the highest portion of variance of the suicidal ideation when the PTSD items were the independent variables in the stepwise multiple regression.

Discussion

With 43% of our patients indicating having or suffering under suicidal thoughts the group is comparable to those people with three or four PTSD symptoms monitored by Marshall and colleagues [8].

The authors defined sub-threshold PTSD as one, two or three PTSD symptoms. They found that in the group with one PTSD symptom 13% of the people had suicidal thoughts, while with 4 PTSD symptoms 33% were found having suicidal thoughts.

One of the variables explaining the suicide ideation was 'Difficulties in getting asleep'. It has been indicated that sleep complaints are prevalent in suicidal patients [32-36] in whom insomnia is a known risk factor that may be present within the year before a completed suicide [37], as a long term behavioral

Table 8. Stepwise multiple regression; dependent variable 'Inclination to get into explaining and arguing' (SCL74), independent variables SCL-90-R items

	Multiple R	Adjusted R square	Beta	p
(67) Desire to break things	0.706	0.476	0.633	0.0002
(31) I have to worry a lot	0.780	0.571	0.338	0.0247

Table 9. Stepwise multiple regression; dependent variable 'Difficulties falling asleep' (SCL44), independent variables SCL-90-R items

	Multiple R	Adjusted R square	Beta	p
(02) Nervousness	0.702	0.469	0.669	0.0000
(40) Stomach troubles	0.773	0.559	-0.592	0.0000
(69) Feeling uncomfortable when with others	0.871	0.722	0.351	0.0001
(60) Desire to overeat	0.920	0.815	0.181	0.0055
(30) Depression	0.946	0.866	0.213	0.0015
(26) Self blame	0.968	0.915	-0.243	0.0004
(09) Memory difficulties	0.977	0.935	0.152	0.0105
(51) Emptiness	0.984	0.950	0.160	0.0282

Table 10. Stepwise multiple regression; dependent variable 'Lack of appetite' (SCL19), independent variables SCL-90-R items

	Multiple R	Adjusted R square	Beta	p
(27) Back pain	0.648	0.345	-0.751	0.0000
(31) Feeling I should worry a lot	0.783	0.554	0.473	0.0000
(49) Hot and cold waves	0.843	0.649	0.552	0.0000
(22) Fear of being caught	0.896	0.749	-0.631	0.0000
(01) Headache	0.929	0.814	0.346	0.0000
(65) Compulsive repetition of acts	0.952	0.866	0.507	0.0000
(35) Others know my thoughts	0.970	0.909	0.316	0.0000
(11) Easily angry and irritated	0.978	0.927	-0.493	0.0000
(17) Shaking	0.986	0.950	0.423	0.0000
(05) Decreased interest in sex	0.992	0.971	0.141	0.0029
(48) Difficulties in breathing	0.995	0.981	0.252	0.0001

Table 11. Stepwise multiple regression; dependent variable 'Fear to leave home alone' (SCL25), independent variables SCL-90-R items

	Multiple R	Adjusted R square	Beta	p
(23) Sudden startle without reason	0.683	0.442	0.904	0.0000
(50) Avoiding places/activities	0.801	0.607	0.655	0.0000
(55) Difficulties in concentration	0.851	0.684	0.617	0.0002
(44) Difficulties in falling asleep	0.891	0.751	0.336	0.0114
(65) Compulsive repetition of action	0.923	0.811	-0.320	0.0168

Table 12. Stepwise multiple regression; dependent variable: suicide ideation, independent variables: items of each of the SCL-90-R scale

	Multiple R	Adjusted R square	Beta	p
Somatization				
1 SCL12 Heart and chest pain	0.362	0.115	0.362	0.0060
Obsessive-compulsive				
1 SCL51 Emptiness in head	0.465	0.200	0.397	0.0037
2 SCL65 Compulsive repetition	0.537	0.256	0.276	0.0392
Interpersonal sensitivity				
1 SCL61 Feeling uneasy when observed	0.492	0.227	0.049	0.0002
Depression				
1 SCL54 Hopelessness	0.568	0.309	0.496	0.0008
2 SCL29 Loneliness	0.629	0.371	-0.360	0.0039
3 SCL79 I am worthless	0.693	0.448	0.379	0.0074
Anxiety				
1 SCL72 Startle and panic fits	0.553	0.293	0.374	0.0077
2 SCL17 Shaking	0.608	0.345	0.309	0.0261
Hostility				
1 SCL67 Desire to break things	0.629	0.383	0.522	0.0000
2 SCL24 Eruption of feelings	0.670	0.428	0.257	0.0290
Phobic anxiety				
1 SCL82 Fear of fainting	0.588	0.333	0.447	0.0002
2 SCL13 Fear of open places	0.675	0.435	0.361	0.0019
Paranoid ideation				
1 SCL43 Others are observing me	0.471	0.207	0.471	0.0003
Psychoticism				
1 SCL85 Thoughts of being punished for my sins	0.648	0.400	0.571	0.0020
2 SCL87 Something is seriously wrong with my body	0.731	0.501	0.348	0.0156
PTSD				
1 SCL59 Thoughts about death and dying	0.753	0.549	0.485	0.0032
2 SCL90 Something is wrong with my mind	0.824	0.652	0.428	0.0080

characteristic in male suicides [38], and in severe suicidal attempters in a managed care population [39]. Considering the often described understanding of psychological problems by this group of patients treating sleep difficulties could be a good point of entry for a psychotherapy with some suicide preventive consequences.

Conclusion

This is a cross-sectional study of a clinical sample with all the known limits and caveats for generalizing any results. Nevertheless, we could indicate that suicide behavior presents a serious problem next to the expected PTSD-symptoms. Consequently, a substantial amount of the described patients are at high risk for suicide, thus making the psychotherapy urgent. However, the suicide issue should be addressed in a specific treatment, than despite of the high correlation with depression and PTSD suicide prevention requires a specific intervention [40]. There are only a few studies indicating some success in the psychotherapy treatment of the war and torture survivors [41,42]. Yet, suicide and suicide attempts in war and torture survivors still remain unpredictable then there is lack of evidence-based suicide prevention interventions for this group of people.

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