Invisible and Visible Wounds of War-Syrian Refugees Crisis, Syrian War Crisis, PsyWar Syndrome and their Waste on People's Thoughts, Feelings, and Behaviors Comparison Before and After the War and with Countries at Peace

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Abstract

Background: In normal conditions, depression, suicidal behavior, negative automatic thoughts, and other mental and psychiatric disorders are the important problems for people. Steps should be taken by counseling services to provide good psychological-social programs and psychotherapy programs and very easy access for those people who need help.

Objective: Assess the impact of War on the thoughts, feelings, and behaviors and their prevalence rates in War conditions in Syria.

Methodology : A descriptive cross-sectional epidemiological study was conducted on 320 participants (100 MS patients and 220 students) during Wartime. These instruments (QID-2-Ar, BDI-FS-Ar, MADRS-S-Ar, ATQ-18-Ar, BDI-II, DASS-21, RSES and SWLS) were used in this study.

Result: During Wartime, prevalence rates of PsyWar Syndrome are very high due to only the War. Prevalence rates were depressive mood 61/52%, anhedonia 72/69%, depression 15-79/13-63%, suicidal behavior 38/27%, anxiety 82/76%, stress 68/69%, lower self-esteem 100/96%, and dissatisfaction with life 63/31% in students and MS, respectively. In MS, 4% have moderate self-esteem. 34% students and 68% MS have satisfaction with life. MS have negative automatic thoughts (mean T-score= 51.32 vs. 50.48 for positive automatic thoughts). Mean T-score for a negative and positive automatic thought is 50.00 for students.

Conclusion: In geopolitical events, War in Syria-abnormal conditions, thoughts, feelings, and behaviors are very important problems for students and patients. Therefore, cognitive positive psychotherapy programs which are easily accessible based on Repeating Phrases of Positive Thoughts have been provided for some students and patients. In normal conditions, we have everything by everything in the world; but in War and/or abnormal conditions, problems increase and appear easily. Finally, this is the first study that evaluates the prevalence rates of psychological morbidity in recent geopolitical events in Syrian population with War conditions.

Keywords: Prevalence Rates; Depression ; Suicide ; Multiple Sclerosis Patients; Students; Syria; Wartime

Introduction

In War conditions in Syria (Important Recent Geopolitical Events), it's very interesting to study the people's thoughts, feelings, and behaviors influenced by these events and offal's on peoples. For this, we compare the people's thoughts, feelings, and behaviors before and after and in War conditions in Syria.

Feelings and behaviors have been correlated with thoughts. Negative thoughts have been inversely correlated with positive thoughts. Depression, anxiety, stress were positively correlated with negative thinking and inversely correlated with positive thinking. Self-esteem and satisfaction with life were positively

correlated with positive thinking and inversely correlated with negative thinking [2,9].

Before the War in Syria, in a study done in 1999 and published in 2003, Radwan [3] found that severe depression using BDI-II affects 5.4% of Damascus University students [3,4], 5.7 in males and 5.5% in females. In the study of Radwan S [5] on the prevalence of symptoms in university and non-university samples, the prevalence of depressive symptoms was 4.9% in males, 7.9% in females, 5.3% in married couples and 9.6% among singles [3]. In 2001, Radwan [6] has estimated the prevalence rates of depression and pessimism in adults and adolescents students (men and women) among university and school (Table 1). In study in 2011 on adolescents [7], prevalence rates were 4.59% for state anxiety, 4.84% for trait anxiety, and 7.90% for depression.

Table 1: Prevalence rates of depression and pessimism in Syria before War Radwan (2001).

Prevalence rates	Depression	Pessimism
Men (university and school secondary)	5.6%	4.8%
Women (university and school secondary)	5.1%	4.8%
Men (university)	5.7%	6.1%
Women (university)	5.4%	6.0%
Men (school secondary)	5.2%	5.3%
Women (school secondary)	5.2%	5.2%

In War in Syria, the Syrian adults are suffering from depressive symptoms; and the mental and psychiatric disorders are one of the most common disorders in war conditions [1,4,8,10,11,52]. In War, in 2015-2016, the prevalence of depression evaluated by BDI-FS-Ar was 79.00% in students at Damascus University, and 63.00% in multiple sclerosis (MS) patients in Syria [4,10]. There are not the data about prevalence rates of depression and other psychological disorders in MS in Syria. The prevalence rates of depression in multiple sclerosis were estimated the first time in War [4, 10]. This is the same for the students.

The Aim of the Current Study is double

- Examine the impact of war and offals on the thoughts, feelings, and behaviors in non-clinical (students) and clinical (MS) samples.
- Assess the prevalence rates of thoughts, feelings, and behaviors among Syrian in War conditions: evaluate the frequency of depression, two main depressive symptoms

of DSM-IV (depressive mood and an hedonia), suicidal behavior, negative and positive automatic thoughts, anxiety, stress, self-esteem and satisfaction with life in non-clinical and clinical samples in War conditions in Syria.

Methods

Participants and Sample Size : A descriptive cross-sectional epidemiological study was conducted on 320 volunteer participants: 100 MS Syrian patients aged 18 and 60 years, 200 students of the Damascus University aged 18 and 36 years, and 20 females' students of Cited Damascus University aged 19 and 27 years. 65 among 100 MS patients have completed the ATQ-18-Ar [2], and 20 females students have also completed the ATQ-18-Ar [2].

Human Ethics Committee: Concerning students, they were from all disciplines at the University of Damascus and from all years, and graduated. For MS, Damascus Hospital and Ibn Al-Nafees Hospital, Human ethics committee approval protocol number was 5174/10/07/2015-خ.

Instruments and Measures : QID-2-Ar(Quick Inventory of Depression-Two questions-Arabic) [10,12-14]; BDI-FS-Ar(Beck Depression Inventory-Fast Screen-Arabic) [4]; ATQ-18-Ar (Automatic Thoughts Questionnaire-18 item- Arabic) [2]; MADRS-S-Ar (Montgomery-Asberg Depression Rating Scale Self-assessment-Arabic) [15,16]; BDI-II (Beck Depression Inventory-II) [17], DASS-21 (Depression Anxiety Stress Scale-21) [18,19], RSES (Rosenberg self-esteem scale) [20], and SWLS (Satisfaction with life scale) [4,10,21] were used in this study.

Three scales assess mood status and depression symptoms severity in the last 2 weeks which are a screening test (QID-2-Ar), and two confirming tests (BDI-FS-Ar and BDI-II). A scale evaluates depression symptoms severity over the last three days which is MADRS-S-Ar. The last scale assesses the depression symptoms severity over the last week which is DASS-21. This last (DASS-21) evaluates also the anxiety and stress symptoms severity over the last week. In additional, we calculated the prevalence rates of self-esteem by RSES and satisfaction with life by SWLS. According to BDI, we calculated also the prevalence rates of suicide risk and the main symptoms of depression among students and MS patients in War. ATQ-18-Ar evaluates the negative and positive automatic thoughts over the last week.

Statistical Analyses: If there is a missing value, it has been replaced by the mean of that item [22]. There were not data exclusions. Mean (M) and standard deviation (SD) for all data were calculated. In War, sociodemographic and clinical data have been collected. Prevalence rates of depression, risk of suicide, depressive mood, an hedonia, anxiety, stress, self-esteem, satisfaction with life were calculated in percent (%). T-score was calculated. Data analysis was carried out using software R (programming language). The significant level was set at $p < 0.05$.

Results in War

Table 2: Characteristics of the Samples.

Variable	200 Students		100 patients with MS	
	M	SD	M	SD
Age	23.55	6.42	33.77	10.91
Sex – n (%)				
Men	57(28.5%)		29(29%)	
Women	143(71.5%)		71(71%)	
QID-2-Ar	1.32	0.76	1.21	0.76
Depression-BDI-FS-Ar	7.26	4.6	4.95	4.29
Depression-MADRS-S-Ar	7.97	4.49	5.82	4.76
Depression-BDI-II	20.75	10.65	14.7	9.1
Depression-DASS-21	7.91	4.33	7.16	5.29
Anxiety-DASS-21	7.34	4.15	8.67	5.76
Stress-DASS-21	9.85	4.49	10.76	6.14
Self-esteem (RSES)	18.86	4.97	21.22	5.89
Satisfaction with life (SWLS)	18.34	6.13	22.34	8.02
Place of residence	Urban and semi- Urban: 52.5%; Rural and semi-rural: 47.5%		Urban and semi- Urban:62%; Rural and semi-rural:38%	
Economic situation	Poor: 8%; Moderate: 72%; Good: 20%.		Poor: 18%; Moderate: 67%; Good: 15%.	
Currently lives (Living arrangement)	Alone: 11%; With parents: 54.5%; With family: 10%; with friends: 18.5%; Others: 6%.		Alone: 4%; With parents: 23%; With family: 56%; With friends: 2%; Others: 15%.	
Difficulty to wake up in the morning	no:50%; yes:50%		no:70%; yes:30%	
Quality of sleep	Very good: 6.5%; good: 16.5%; moderate: 43.5%; poor:16.5%; very poor:17%.		Very good: 3%; good: 17%; moderate: 35%; poor: 33%; very poor: 12%.	
Fear for examinations	no: 52.5%; yes: 47.5		/	/
Educational satisfaction	no: 18.5; undecided: 22; yes: 59.5		/	/
Time since diagnosis of MS	/		One month - 9 years. M: 4.35±3.63	
Number (N)	Students: 200		MS patients: 100	
ATQ-18-Ar	Number: others 20 students have completed ATQ-18-Ar.		Number: 65 among 100 MS patients have completed ATQ-18-Ar, because it was inserted late.	
ATQ-18-Ar-Positive Thinking	19.20±7.63		34.0±8.25	
ATQ-18-Ar-Negative Thinking	19.75±4.33		17.0±9.08	

Descriptive Statistics and Characteristics of the Sample

: We conducted a first phase of descriptive analysis whose results are presented in (Table 2). The demographic and clinical

characteristics of students and MS patients are described using mean (M), standard deviations (SD) and percent (%).

Table 3: Prevalence rates of people's thoughts, feelings, and behaviors influenced by War among students (n=200) and MS patients (n=100).

Prevalence in War		Percentage (%) -200 Students	Percentage (%) -100 MS patients
QID-2-Ar(screening test) (Chae, Chae, Tyndall, Ramirez, and Winter, 2012; see Kubitary and Alsaleh, 2017)	Cut-off scores		
Q1 (depressive mood)	=1	61	52
Q2 (anhedonia)	=1	71.5	69
QID-2-Ar	≥1	82	80
QID-2-Ar	=2	50	41
Depression-BDI-FS-Ar (cut-off scores, depression symptom severity) - severity distribution of BDI-FS-Ar scores (Alsaleh 2016 b; Kubitary et al. 2017)			
No depression (Absence of depression)	0-3	21	37
Mild depression	4-6	23	39
Moderate depression	7-9	29.5	10
Severe depression	10-21	26.5	14
Total		79	63
Depression-MADRS-S-Ar (cut-off scores, depression symptom severity) - severity distribution of MADRS-S scores			
No depression (Absence of depression)	≤12	85	87
Mild depression	13-19	14	13
Moderate to severe depression	≥20	1	0
Total		15	13
Depression-BDI-II (cut-off scores, depression symptom severity) - severity distribution of BDI-II scores			
No depression (Absence of depression)	0-13	26.5	50
Mild depression	14-19	15	24
Moderate depression	20-28	40	15
Severe depression	29-63	18.5	11
Total		73.5	50
Depression-BDI-II (cut-off scores, depression symptom severity) - severity distribution of BDI-II scores			
Normal	1–10	16	39
Mild mood disturbance	11–16	18	27
Borderline clinical depression	17–20	11	10
Moderate depression	21–30	38.5	17
Severe depression	31–40	12.5	5
Extreme depression	more than 40	4	2
Total		84	61
Depression-DASS-21 (cut-off scores, depression symptom severity) - severity distribution			
Normal (Absence of depression)	0 - 4	24	35
Mild	6-May	12.5	16
Moderate	10-Jul	38	18
Severe	13-Nov	15	17

Extremely severe	14 +	10.5	14
Total		76	65
Anxiety-DASS-21 (cut-off scores, anxiety symptom severity) - severity distribution			
Normal(Absence of anxiety)	0 - 3	18.5	24
Mild	5-Apr	16.5	12
Moderate	7-Jun	19	5
Severe	9-Aug	17	18
Extremely severe	10 +	29	41
Total		81.5	76
Stress-DASS-21 (cut-off scores, stress symptom severity) - severity distribution			
Normal(Absence of stress)	0 - 7	32	31
Mild	9-Aug	12	5
Moderate	12-Oct	29	16
Severe	13 - 16	18	30
Extremely severe	17+	9	18
Total		68	69
Self-Esteem-SES (cut-off scores) - severity distribution			
Very low to low	31-Oct	100	96
Moderate	31-34	0	4
Strong to very strong	>34	0	0
Satisfaction with Life-SWLS (cut-off scores) - severity distribution			
Extremely satisfied	31 - 35	3	16
Satisfied	26 - 30	10.5	21
Slightly satisfied	21 - 25	20.5	31
Total	Satisfied:34		68
Neutral	20	3	1
Slightly dissatisfied	15 - 19	37	14
Dissatisfied	14-Oct	17.5	10
Extremely dissatisfied	9-May	8.5	7
Total	Dissatisfied :63		31
Suicide risk indicators		Main Symptoms of Depression	
BDI Indicators-severity distribution (see Alsaleh, 2016b)	Item 2 (Pessimism) (%)	Item 7 (Thoughts or desires of suicide) (%)	Item 1 (Sadness) (%)
	Item 4 (Loss of pleasure) (%)		
	Answer positively on each item (%).		
	Students: 64	51	90.5
	MS:43	27	86
	Answer positively on at least one of the two items (%).		
	Students:64; MS: 43		Students: 90.5;MS: 86
	Answer positively on both items at once (%).		
Students: 38;MS: 27		Students: 70;MS: 55	

Prevalence rates of PsyWar Syndrome: depression and others mental and psychiatric disorders in War: Based on score ranges from the BDI-FS-Ar, MADRS-S-Arand DASS-21 manual, 27%, 1%, 26% students and 14%, 0%, 31% MS patients have severe or extremely severe depression (Table 3). This percentage was 46% students and 59% MS patients for anxiety

and 27% students and 48% MS patients for stress (Table 3). Based on BDI-FS-Ar, mean scores of depression for all students were found to be at moderate level and MS patients were found to be at mild level confirming by BDI-II. But, based on MADRS-S-Ar, mean scores of depression for all students and MS patients were found in the absence of depression (Tables 2 & 3). Based

on DASS, mean scores of depression for all students and MS patients were found to be at moderate level, the scores of anxiety at moderate to severe level, and the scores of stress at moderate level. Based on RSES, students and MS patients have of low self-esteem. Based on SWLS, mean scores of satisfaction with life for all students were found to be at slightly dissatisfied level and MS patients were found to be at slightly satisfied level (Table 2).

Based on BDI Indicators, suicide risk for students was found to be at high level comparing with MS patients. In additional, main symptoms of depression of DSM, were also very high in students comparing with MS (Table 3). With regard to negative and positive automatic thoughts, the mean scores for MS patients are 17.0 and 34.0, and for students 19.75 and 19.20, respectively (Table 2). For this, based on standard score, T-score was applied on the scores of negative and positive automatic thoughts for compare between these two scores. The mean of T-score for the scores of negative automatic thoughts in MS patients (mean T-score= 51.32) is higher than the mean of T-score for the scores of positive automatic thoughts (mean T-score= 50.48). For students, the mean of T-score for the scores of negative and positive automatic thoughts is the same (mean T-score= 50.00).

Discussion

The present study examined the impact of War on thoughts, feelings, and behaviors and their prevalence rates of psychological morbidity in recent geopolitical events -War in Syria. Concerning first objective, War and offals have an impact on people's thoughts, feelings, and behaviors. Populations become more depressed, anxious, stressed, and have lower self-esteem and dissatisfaction with life. They have more depressive mood, an hedonia and risk of suicide; and more negative automatic thoughts.

Before this War, prevalence rates of depression, pessimism [3,5,6] and others disorders were close to global prevalence rates. In the War in Syria, the MS have a depressive symptomatology, anxiety, stress, lower self-esteem, dissatisfied with life less than the students. Students have a greater risk of suicide than MS. The suicidal risk of depressed people exists not only in adulthood but also in adolescence and patients [6,9,23]. In this study, prevalence rates of pessimism and thoughts or desires of suicide are very high. People have a clear depressive symptomatology in Syria but, on an equal level, they have a greater risk of suicidal ideation. This could be explained by the greater aggressiveness in some individuals. This aggressiveness can be expressed by an increase in suicidal ideation in depressive individuals. Depressive symptomatology and suicidal ideation are clear in countries at peace among adults and adolescents [22,24].

Concerning second objective, in this study, the prevalence rates of depression, depressive symptoms and their severity in War conditions have been assessed according to five scales, their cut-off scores, their evaluation period and their several

modalities of responses. In accord with Ibrahim[25], prevalence rates of depression and mental and psychiatric disorders and presence of psychological morbidity in this study varied largely across settings, depending cut-off scores, evaluation period, several modalities of responses, and also depending on cultural back-grounds and study instruments.

It is clear that the prevalence rates of depression, anxiety and stress symptoms, their severity, risk of suicide, depressive mood, an hedonia low self-Esteem and dissatisfied with life are very high in War compared with prevalence rates among Syrian students before this War [3,5,6]. Concerning students, compared with others studies on students which conducted in countries at peace such as Turkey [26], Malaysian [27], Egypt [28], India [29], Pakistan [30], China [31], France [9], Worldwide [31-33] and globally [9,34-37,44-51], prevalence rates of depression, anxiety and stress are very high in these studies. In this study, prevalence rates are higher due to only the War.

Concerning MS patients, interpretation is similar. Depression is frequent in multiple sclerosis (MS), and the prevalence rates of depression in MS according to BDI-II are 50% and 0.65 according to DASS-21. This prevalence rate is diagnosed in other studies [4,10,38,39,41].

Most people such as students tend to be positive in their thinking styles, in agreement with [9,42,43]. With regard to ATQ-18-Ar, MS patients have a positive thoughts level higher than the level of negative thoughts. MS patients announce that the faith and religious beliefs help them to think positively. Despite the war, MS patients think positively but not the students. It is observed that the mean scores of positive automatic thoughts are higher than the mean scores of negative automatic thoughts, but the people suffer always the psychological morbidity, psychological distress, depression, depressive mood, an hedonia, stress, anxiety, etc. It's observed that MS patients think negatively according to mean of T-score. In War, the mean scores of negative and positive automatic thoughts in students and MS patients were vary (positive automatic thoughts increase and negative automatic thoughts decrease) when the positive and cognitive psychotherapy has been applied [1,8,9,11]. So, provide of the psychological-social support and treatment for victims of war and refugees are very important in war.

Victims are mostly "young and children" incidence of depression has increased significantly. Young people's are the biggest victims, because in these ages, they always have an expectation for the near future and long life. The hope is what gives the vitality of the person at this age. In the event of any circumstances as Wartime may dispel this hope the young man vulnerable to depression and suicidal ideation.

Conclusion

Caused by War, prevalence rates are really surprising, but that is probably reasonable because of the bad and abnormal

conditions due to the War in Syria at the moment. In comparing the results in this study with others studies which conducted in countries at peace and globally, we acknowledge that prevalence rates are not surprising because the prevalence rates of psychological morbidity in peace countries have been found to be very high. But we must not forget that War and its conditions have played a very important role in increasing the prevalence rates of mental and psychiatric disorders and developing the presence of psychological morbidity. We do not also forget that the presence of psychotherapy and psychological-social support decrease mental and psychiatric disorders in victims of War and refugees.

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