

Secondary Traumatic Stress (STS) among Security Forces

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Abstract--- *Purpose: This article aims to exam the prevalence of secondary traumatic stress (STS) among security forces as well as to investigate the difference in STS according to educational level social state. Methods: (203) participants of security forces were selected from internal ministry. The Arabic version scale of secondary traumatic stress (STS) is used to achieve the study's objects. Results: the results showed that most commonly symptoms identified were Inability to recall traumatized colleagues' information, followed by cued physiological reaction, irritability, and hypervigilance. However, a fewer symptoms experienced were reported in diminished activity level, avoidance of people, places, and things and emotional numbing. In addition, the results found that female reported more symptoms of STS than male. However, no significant differences were found in STS according to educational level and social state.*

Keywords--- *Secondary Traumatic Stress, Security Forces, Trauma, Iraq.*

I. INTRODUCTION

Previous literature emphasizes the psychological effects of direct exposure to severe traumatic events such as victims of crime, natural disasters, war, terrorism, and others. However, most studies and researches focus on individuals who have experienced direct trauma, but have not been directly exposed to secondary or indirect trauma (Figley, 1999). With the increasing studies that dealt with the stresses caused by the trauma, it became increasingly clear that the effects of traumatic events are not limited to those directly exposed to them, but rather that their effects extend to those exposed to the events indirectly.

Figley (1983) identified the first secondary trauma as a natural reaction to a traumatic material of survivors with which the helps identify and empathize as an emotional stress suffered by persons who have close contact with a trauma survivor, especially family members (Figley & Kleber, 1995). The negative consequences of secondary exposure to traumatic events include intrusive imagery, avoidance of event's memories and cues, distressing emotions, hyperarousal, and functional impairment. STS may ultimately warrant a posttraumatic stress disorder (PTSD) diagnosis (B. E. Bride & Figley, 2009).

Consequently, stresses from secondary trauma are an occupational risk in providing direct forces to people with trauma (Clark & Gioro, 1998; Figley, 1995; Pearlman & Saakvitne, 1995). The symptoms of secondary trauma have a similarity with PTSD symptoms. However, the basic difference between them that PTSD could be developed when exposure to a traumatic event, whereas STS may been developed as a result of hearing about a traumatic event (B. E. Bride & Figley, 2009).

In the majority of trauma research, in addition to lack in research in crime abuse, the key victims' experience and

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posttraumatic stress disorder are the main subject of these studies. Little has been compared with secondary / indirect victim(s) (such as trauma workers, families, friends, counselors) and STS (Dominguez-Gomez & Rutledge, 2009; Salston & Figley, 2003).

STS work has been plagued by a lack of conceptual clarification. To this ambiguity leads at times the use of specific words to refer to the same definition. Closely related terms need to be distinguished from STS (compassion fatigue), burnout, and vicarious trauma. STS (Compassion Tiredness). It can traumatize an individual only by learning about an incident that has happened to somebody else. Secondary trauma occurs "when traumatic stress appears to 'infect' the whole system after it first appears in one member only" (Figley, 1995).

Gentry, Baranowsky, and Dunning (2002) outlined in the literature the following symptoms of STS: "increased negative arousal, intrusive thoughts/images of another's critical experiences, difficulty separating work from personal life, lowered frustration tolerance, increased outbursts of anger or rage, dread of working with certain individuals, depression, ineffective and/or self-destructive, self-soothing behaviors, hypervigilance, decreased feelings of work competence, diminished sense of purpose/enjoyment with career, lowered functioning in nonprofessional situations, and loss of hope" (p. 126).

Although there is a large body of research to explore the direct exposure of police officers to shocks, MacEachern et al. (2011) highlighted that there is a lack of research looking to influence individuals indirectly exposed to trauma. STS will unexpectedly evolve and without much warning. Symptoms of STS can also include feeling powerless and confused, and feeling separated from supporters. Such signs are often unrelated to real causes (Figley, 1995). Some healthcare professionals use the term traumatic secondary stress uncomfortably and find this mark offensive (Beck, 2011).

The literature collection describes the ways police officers can be influenced by exposure to stressful circumstances. Also, this study explores the frequency or incidence of PTSD and other traumatic symptoms among police officers in various situations such as death exposure, death attack, murder or "body handling" (Greinacher, Derezza-Greeven, Herzog, & Nikendei, 2019; Hurrell, Draycott, & Andrews, 2018; MacEachern, Dennis, Jackson, & Jindal-Snape, 2019). Most of these trauma study studies by police officers focused on people who were personally subjected to trauma with the intention of improving PTSD-related care (Palm, Polusny, & Follette, 2004).

These individuals are not directly exposed to, but indirectly exposed to, a painful event, for instance through experiences of others. It is very likely that psychosocial experts will meet people experiencing one or more traumatic events (Fine, 1994). This involves specialists in the fields of legal, and mental health, and other emergency staff (as well as police officers, firefighters, paramedics) (Palm et al., 2004).

As a result of the circumstances experienced by Iraq and because the current sample of research is from employees of the Ministry of Interior, many of them may have been exposed to traumatic events directly or indirectly. Therefore, the current research will answer questions about the extent of the sample's affliction after STS.

Study Objects

The study aimed to:

1. Assess the extent of secondary trauma symptoms among security forces that exposed indirectly to traumatic events.
2. Examine differences in symptoms of secondary trauma by gender and educational level, and social status.

Participants

Two hundred and three security forces (Table 1) were selectively selected from the Baghdad city's internal ministry. The participants were asked to answer the questionnaires on paper basis..An Inclusion criteria has been used to identify participants they must not be been exposed to traumatic events.

Table 1: Sample Characteristics

Variable	Categories	n	%
gender	Male	167	82.03
	Female	36	17.07
Qualification	Secondary school	20	9.9
	Bachelor	161	79.3
	Post graduated	19	9.3
Social State	Married	147	72.4
	Single	42	20.7
	Devoice /Widower	14	6.9

Measurement Tools

The secondary traumatic stress scale (STSS) is a 17 scale designed to measure 3-dimensional secondary trauma (Table 2): intrusion (5items), avoidance (7items), and arousal (5items). This scale war translated into Arabic language and administrated in Iraqi culture by Najlaa (2016) which is based in the scale of Bride and his colleagues (B. E. Bride, Robinson, Yegidis, & Figley, 2004).

Bride (2004) has used the criteria of DSM-IV and developed three subscales to reflect factors needed for PTSD diagnosis, except the exposure criterion A, which entails exposure.

Bride statements the exposure element in the STSS by changing the terminology and the involvement of “stressor-specific items” in the survey to reflect that the traumatic stressor is the exposure to clients.

The participants rate how much they have felt each symptom in the last few days using a Likert scale of 1 (often) to 5 (very often). If a participant indicated that a symptom was experienced “occasionally,” “often,” or “very often,” the symptom would be perceived as present. The internal consistency of the STS scale, a stability measure, was extremely good (0.82) for the full STSS in the Iraqi study done by Najlaa (2016).

Inclusion Criteria

Individuals were not exposed directly to traumatic events.

II. RESULTS

Frequency of STS Symptoms

The mean and standard deviations were used for each STS symptom according to each Likert scale reported by the participants (Table1). According to the frequency of symptoms, item (17) in avoidance criteria was the most frequently items reported by participants with around 53% in (often and very often). However, the less frequently

symptoms was reported in item (9) with 17% in avoidance criteria as well. The rest of the frequencies were varied according to the responses of the participants.

Individual Symptoms

PTSD domain records single symptom. The two most commonly reported intrusion symptoms were Intrusive thoughts about traumatized colleagues and Sense of reliving colleagues' trauma; with 38.4% and 37.9% respectively. The remaining symptoms of intrusion were less commonly identified. Regarding symptoms of avoidance, the most frequently informed symptom was Foreshortened future (43.8%). Next was Avoidance of traumatized colleagues with (34.8%) of participants. Other symptoms of avoidance have been identified less frequently.

For arousal, the most reported symptoms was easily startled with (53.2%) of the participants. The second most frequently reported symptom was Hypervigilance as the participants reported (40.9%). Both Difficulty sleeping and irritability symptoms had the same frequency with (30%). Other remaining arousal symptoms were sated less frequently.

Table 2: Frequency of STS Symptoms Described by Security forces (N = 203)

<i>Criterion (item No.)</i>	<i>Never [n (%)]</i>	<i>Rarely [n (%)]</i>	<i>Occasional ly [n (%)]</i>	<i>Often [n (%)]</i>	<i>Very often [n (%)]</i>	<i>Mean</i>	<i>SD</i>
Criterion B: Intrusion symptoms							
I thought about my work with traumatized when I didn't intend to (10)	55 (27.1)	30(14.8)	75 (36.9)	34(16.7)	9(4.4)	.40	.21
I had disturbing dreams about my work with traumatized (13)	53(26.1)	41(20.2)	50(24.6)	34(16.7)	25(12.3)	.45	.29
It seemed as if I was reliving the trauma(s) experienced by my colleagues (3)	18(8.9)	70(34.5)	38(18.7)	56(27.6)	21(10.3)	.48	.37
Reminders of my work with traumatized people upset me (6)	61(30)	41(20.2)	39(19.2)	44(21.7)	18(8.9)	.46	.30
My heart starts beating when I think about the shocks of my colleagues. (2)	20(9.9)	58(28.6)	36(17.7)	76(37.4)	13(6.4)	.49	.43
Criterion C: Avoidance symptoms							
I wanted to avoid working with some traumatized colleagues (14)	44(21.7)	38(18.7)	60(29.6)	43(21.2)	18(8.9)	.45	.30
I avoided people, places, or things that reminded me of my work with traumatized (12)	43(21.2)	51(25.1)	73(36)	31(15.3)	5(2.5)	.38	.17
I noticed gaps in my memory about my work with traumatized people (17)	15(7.4)	15(7.4)	65(32)	64(31.5)	44(21.7)	.50	.53
I was less active than usual(9)	50(24.6)	50(24.6)	66(32.5)	21(10.3)	16(7.9)	.38	.18
I had little interest in being around others (7)	36(17.7)	50(24.6)	39(19.2)	43(21.2)	35(17.2)	.48	.38
I felt emotional numbness(1)	42(20.7)	71(35)	55(27.1)	26(12.8)	9(4.4)	.37	.17
I felt discouraged about the future (5)	40(19.7)	28(13.8)	75(36.9)	38(18.7)	22(10.8)	.45	.29
Criterion D: Arousal symptoms							
I had trouble sleeping (4)	39(19.2)	57(28.1)	49(24.1)	36(17.7)	22(10.8)	.45	.28
I was easily annoyed(15)	30(14.8)	37(18.2)	47(23.2)	64(31.5)	25(12.3)	.49	.43
I had trouble concentrating(11)	35(17.2)	63(31)	63(31)	46(22.7)	15(7.4)	.45	.30
I expected something bad to happen (16)	11(5.4)	29(14.3)	80(39.4)	46(22.7)	37(18.2)	.49	.40
I felt jumpy(8)	36(17.7)	53(26)	54(26.6)	36(17.7)	24(11.8)	.45	.29

Diagnostic Criteria

The diagnosis criteria for PTSD contain four elements referring to the 17 STSS symptoms. In order to identify PTSD cases, Bride (2004) expressed an algorithm by using these diagnostic criteria to replicate STSS items. Accordingly, participants showing a minimum of one symptom of intrusion, a minimum of three symptoms of avoidance, and a minimum of two symptoms of arousal, thus follow the PTSD and STS requirements.

Regarding to criterion A (exposure) is expected to be present on the basis of the surveyed population and experienced security forces. This criterion is based on both the STSS specification and dealing with criminals and those involved in terrorist acts is identified as the “traumatic stressor, as well as the nature of the work of the security forces.

Depending on these diagnostic criteria, only 11% of the participants did not fulfill STS criteria (Table 3), although 70% fulfilled all three conditions. The most common symptoms have been found in (criterion C) as 34% of participants experiencing at least 3 Avoidance symptoms. However two or more arousal symptoms (criterion D) were reported by 26% and at least one intrusive symptom was reported by 23% (criterion B).

Level of PTSD Criteria Attributable to Secondary Exposure Linked to Traumatic Population Experience

Criteria met	n	%
None	22	11%
Intrusion (B	46	23%
Avoidance (C)	71	35%
Arousal (D)	53	26%
Intrusion + avoidance (B + C)	117	58%
Intrusion + arousal (B + D)	99	49%
avoidance + arousal (C + D)	124	61%
Intrusion + avoidance + arousal (B + C + D)	141	70%

Differences in Prevalence of STS Scores by Gender

t-test was used to examine the significant of differences between male and female in STS. Table (3) demonstrates that there is a significant difference between male and female in STS. Female reported higher level of STS than Male.

Table 3: The Differences STS between Males and Females

Gender	N	Mean	Std. Deviation	df	t	p
Male	155	46.99	9.09	335	3.18	0.002
Female	48	51.77	9.91			
**p<.01, *p<.05						

Differences STS Scores According to Education Level

ANOVA test was used to examine the significance of the differences among Education level. Table (4) shows a significant difference in STS scores according scores among the groups of education level. The participants who have Secondary school level reported the highest level of STS among the other categories.

Table 4: The Differences in STS According to Education Level

<i>Education level</i>	<i>N</i>	<i>Mean</i>	<i>Std. Deviation</i>	<i>F</i>
Secondary school	20	52.50	8.96	4.64
Bachelor	161	47.13	9.29	
Post graduated	22	48.12	7.77	
** <i>p</i> <.01				

Differences STS Scores According to Social State

To achieve this aim, ANOVA test was used to investigate the significance differences in sts among social state. Table (5) shows a significant difference in STS scores among the groups of education level. The participants who have Secondary school level reported the highest level of STS among the other categories.

Table 5: The Differences in STS According to Social State

<i>Education level</i>	<i>N</i>	<i>Mean</i>	<i>Std. Deviation</i>	<i>F</i>
Married	147	47.72	9.485	.859
Single	42	49.78	9.595	
Devoice/ Widower	14	47.35	4.95	
** <i>p</i> <.01				

III. DISCUSSION

The prevalence of STS among security forces was investigated. This study. At least 1 symptom of STS was identified in this study last week by 70 percent. It is especially important that 70% of the sample fulfills the STS diagnostic criterion. Specific symptoms most commonly identified were Inability to recall traumatized colleagues' information, followed by cued physiological reaction, irritability, and hypervigilance.

Symptoms experienced by fewer participants were diminished activity level, avoidance of places, people, and things and emotional numbing.

STS is much higher in prevalence when the DSM-IV diagnostic test is used when samples have shown at least 1 intrusion symptom, at least one avoidance symptoms and at least two arousal symptoms (APA, 2000).

Comparing the sample of security forces to the 282 social workers stated on by the study of Bride (B. Bride, 2007) suggests that individuals who works at security sector can have greater likelihood of displaying STS criteria of (70% vs. 15%) than are social workers.

The current study also examined the difference in STS according to gender, educational level and social state. The results found that female reported more symptoms of STS than male. However, no significant differences were found in STS according to educational level and social state.

Finely, regard to concern percentage of STS that have founded in security forces, a further investigation needs to be done in wider range of participants in order to support the workers in the security sector and reduced the symptoms.

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