

# Exposure to Violence and Complex PTSD Symptoms among University Students in Baghdad: A preliminary Report.

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## Abstract:

**Background:** Iraqis have been exposed to wars, widespread violence and terrorist activities during the last 3 decades. Few reports were demonstrating the effect of exposure to wars and conflicts on mental health of Iraqis.

**Objective of the study:** estimation of prevalence of some symptoms of complex PTSD among university students in Baghdad.

**Subjects & methods:** A total of 319 university students from Baghdad University and their residency in Baghdad governorate were selected conveniently to participate in the study. Iraqi version of Harvard Trauma Questionnaire (HTQ) was used to measure the trauma exposure. HTQ consisted of 28 items on exposure to traumatic events and we used four prominent symptoms of complex PTSD (feeling of guilty, hopelessness, feeling of a shame, and need for revenge) in HTQ- Iraqi version for Trauma symptoms (part IV) for estimating the prevalence of symptoms of complex PTSD among the participants. A score >2.5 was considered significant for meeting criteria of complex PTSD symptoms.

**Results:** Out of the total, 32 students (10.0%) had complex PTSD symptoms. There was no association between complex PTSD symptoms neither with age nor with sex. Complex PTSD symptoms were positively associated with the number of trauma events.

**Conclusion:** High prevalence of complex PTSD symptoms was revealed among students of Baghdad University.

**Keywords:** complex posttraumatic stress disorder, widespread violence - Harvard Trauma Questionnaire, University student, Baghdad, war.

## Introduction:

Posttraumatic stress disorder (PTSD) is a syndrome that develops after exposure to an extreme stressful event that provokes fear, horror or helplessness<sup>[1]</sup>. The diagnosis of PTSD accurately describes the symptoms that result when a person experiences a short-lived trauma. For example, car accidents, natural disasters, and rape are considered traumatic events of time-limited duration. However, chronic traumas continue or repeat for months or years at a time<sup>[2,3]</sup>. Dr. Judith Herman of Harvard University suggests that a new diagnosis, called Complex PTSD, is needed to describe the symptoms of long-term trauma<sup>[2,3]</sup>.

Much of literature on PTSD focuses on adolescents that have been exposed to a one-time event (e.g. school shooting, natural disaster), neglecting chronic traumatization that is characterized by exposure to traumatic stressors within the same overall context over a period of time ranging from months to years<sup>[4]</sup>.

Clinical observations identify three broad areas of disturbance which transcend simple PTSD. The first is symptomatic: the symptom picture in survivors of prolonged trauma often appears to be more complex, diffuse, and tenacious than in simple PTSD. The second is characterological: survivors of prolonged abuse develop characteristic personality changes. The third area involves the survivor's vulnerability to repeated harm, both self-inflicted and at the hands of others<sup>[5]</sup>. The first requirement for the diagnosis is that the individual experienced a prolonged period (months to years) of total control by another. The other criteria are symptoms that tend to result from chronic victimization. Those symptoms include: symptoms such as persistent

sadness, suicidal thoughts, explosive anger, or inhibited anger, a sense of helplessness, shame, guilt, stigma, and a sense of being completely different than other human beings, attributing total power to the perpetrator or becoming preoccupied with the relationship to the perpetrator, including revenge<sup>[2]</sup>.

For more than three decades, the Iraqi nation as a whole has been suffering from wars, sanctions and widespread violence. The Iraqi children and youth have been so greatly affected by these dire conditions<sup>[6-10]</sup>. Few reports were demonstrating the effect of exposure to wars and conflicts on the mental health of Iraqi youth<sup>[10-14]</sup>. Therefore, this study was carried out to estimate prevalence of some symptoms of Complex PTSD among youth in Baghdad.

## Materials and methods:

Convenience sample of 350 participants was surveyed through cross sectional study and a total of 319 of university students were included in the study as their residency was Baghdad, the sample was selected by feasible way through visiting Baghdad University, Colleges of: Medicine, Veterinary Medicine and Agriculture. The students of the sample were chosen from first and second stages of each college and their age was between 18-24 years. Data collection took place during the period 1<sup>st</sup> Feb. to 30 April 2010. The collected data was confidential and anonymous.

Each participant was asked to complete a questionnaire consisted from instruments, one containing the socio-demographic information about sex, age, health status of parents, income of the family, smoking habits, alcohol consumption.

Second instrument was Iraqi version of Harvard Trauma Questionnaire (HTQ) which consisted of 28 items with a yes/ no response on exposure to traumatic event types throughout the respondent's life time. Third instrument was HTQ- Iraqi version for Trauma symptoms (part IV)<sup>[13,15]</sup>.

We used four prominent symptoms of complex PTSD (feeling of guilty, hopelessness, feeling of a shame, and need for revenge) in HTQ- Iraqi version for Trauma symptoms (part IV)- which include 45 symptom items similar to the HTQ (original)- for estimating the symptoms of complex PTSD among the participants. A score > 2.5 was considered significant for meeting criteria of Complex PTSD symptoms.

Statistical analysis was performed using the Statistical Package for Social Science (SPSS-version 18) program. Chi-square was used to examine the association between Complex PTSD symptoms (dependent variables) with demographic variables and exposure to trauma events (independent variables), independent t test was used to examine the difference between the score of exposure to violence among those who had complex PTSD symptoms and those who had not. P value<0.05 was considered statistically significant.

### Results:

Out of the total, 32 participants (10.0%) had significant symptoms of complex PTSD. Age of participants who had significant symptoms of complex PTSD was  $19.5 \pm 1.1$  years and who had no complex PTSD symptoms was  $19.7 \pm 1.7$  years. No significant statistical difference was noticed in age between those who had complex PTSD symptoms and who had not ( $P = 0.494$ ).

Fourteen (4.4%) of male students and eighteen (5.6%) of female had symptoms of Complex PTSD.

There was no significant difference in PTSD between males and females ( $\chi^2=0.363$ ,  $P= 0.547$ ) (table1). No significant association between health status of parents and complex PTSD symptoms. There was significant association between smoking habits, alcohol consumption and complex PTSD symptoms ( $P=0.02$ ,  $0.008$  respectively) (Table 2) (Table 3). There was no statistical association between monthly family income and complex PTSD symptoms ( $P=0.078$ ). The score of exposure to violence was significantly higher among students who had symptoms of complex PTSD (mean of

exposure to traumatic events = 12) than among students who had no symptoms of Complex PTSD (mean of exposure to traumatic events = 8.8), (95% Confidence Interval 1.167-5.064) (Table4).

There was association between the exposure to certain traumatic events and PTSD with complex PTSD symptoms such as witnessed sexual abuse or rape, witnessed torture, someone informed on you placing you and your family at risk of injury or death, physically harmed (beaten, knifed, etc), sexually abused in any form were statistically associated with complex symptoms of PTSD ( $P=0.002$ ,  $0.001$ ,  $0.038$ ,  $0.000$ ,  $0.000$  respectively).

**Table1:** Gender distribution of complex symptoms of PTSD

|        | Complex symptoms of PTSD | Non Complex symptoms of PTSD | Total |
|--------|--------------------------|------------------------------|-------|
| Male   | 14                       | 106                          | 120   |
| Female | 18                       | 171                          | 189   |
| Total  | 32                       | 277                          | 309   |

$$\chi^2=0.363, df=1, P= 0.547$$

**Table 2:** Association between complex PTSD symptoms and smoking habit.

|              |                             | Smoking habit |              | Total |
|--------------|-----------------------------|---------------|--------------|-------|
|              |                             | Smoker        | Not - smoker |       |
| Complex PTSD | Complex symptoms of PTSD    | 7             | 25           | 32    |
|              | No Complex symptoms of PTSD | 24            | 250          | 274   |
|              | Total                       | 31            | 275          | 306   |

$$\chi^2 = 5.14, d.f. =1, P=0.02$$

**Table 3:** showing association between complex PTSD symptoms and alcohol consumption

|              |                             | Alcohol consumption |          | Total |
|--------------|-----------------------------|---------------------|----------|-------|
|              |                             | Positive            | Negative |       |
| Complex PTSD | Complex symptoms of PTSD    | 3                   | 27       | 30    |
|              | No Complex symptoms of PTSD | 5                   | 267      | 272   |
|              | Total                       | 8                   | 294      | 302   |

$$\chi^2 = 6.98, d.f. =1, p=0.008$$

**Table 4:** The Violence exposure score among those who had Complex PTSD symptoms and who had not.

| Complex PTSD            |                          | N   | Mean  | Std. Deviation | Std. Error Mean |
|-------------------------|--------------------------|-----|-------|----------------|-----------------|
| Violence exposure score | Complex PTSD symptoms    | 32  | 12.00 | 6.032          | 1.066           |
|                         | No Complex PTSD symptoms | 277 | 8.88  | 5.214          | .313            |

T= 3.147,  $P=0.002$ , 95% Confidence Interval of the Difference (1.167- 5.064)

### Discussion:

Previous studies show the rate of general PTSD symptoms among youth in Baghdad was (22.9%)<sup>14</sup>, in Mosul was (22.1%)<sup>13</sup>, in Erbil among internally displaced people for age group 18-27 years

was (26.5%)<sup>16</sup>, to best my knowledge no previous study was carried out to estimate the prevalence of complex PTSD among Iraqi or Arabic population. The finding of this study which revealed that

participants had symptoms of complex PTSD was consistent with that reported in literature<sup>[1,3]</sup>.

The complex PTSD occurred during long-term trauma. The victim is generally held in a state of captivity such as concentration camps, prisoner of war camps, long-term severe physical abuse and long-term domestic violence. The Iraqi population has been exposed to multiple long term traumatic events for decades. The condition was exaggerated after 2003 in which traumas of killing, kidnapping, torture, different forms of abuses, prisoners of war camps were distributed widely and had potential effects on individuals and families (personal observation).

The association between smoking habits, alcohol consumption and symptoms of complex PTSD is consistent with that reported in the literature<sup>[17]</sup> which revealed a relationship between exposure to different life adversities and multiple health risk factors such as smoking, alcoholism and drug abuse. It has been reported that people who had experienced sexual abuse in childhood or adulthood had more symptoms of PTSD they were also more likely to use drugs or alcohol to cope and to withdraw from people<sup>[18]</sup>.

The majority of participants with symptoms of complex PTSD had significant association with traumas of captivity especially witnessed sexual abuse or rape, witnessed torture, someone informed on you placing you and your family at risk of injury or death, physically harmed (beaten, knifed, etc...), sexually abused in any form ( $P=0.002, 0.001, 0.038, 0.000, 0.000$  respectively), this finding was consistent with that reported in literature<sup>[1,3]</sup>.

The rate of symptoms of complex PTSD was (10.0%). It might be a high rate as the Iraqi population was exposed to widespread violence. This fact due to that complex PTSD is a special entity and occurred during certain conditions such as captivity<sup>[5]</sup>.

### Conclusion:

High prevalence of complex PTSD symptoms was revealed among students of Baghdad University. Further studies may clarify the epidemiology of Complex PTSD in Iraq.

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