

Assessment of Post-Traumatic Stress Disorder Among Shengalian Internally Displaced Persons

Zidan Khalaf Murad

University of Duhok, College of Nursing, Iraq

Post Traumatic Stress Disorder is a psychiatric disorder that happens after an individual witnessed or experienced traumatic or terrifying event such as killing, threatening, kidnapping, and sexual or physical abuse, etc. that induce a serious danger to someone's life. The present study was established in order to assess the prevalence of Post Traumatic Stress Disorder among Shengalian Internally Displaced Persons.

A descriptive, retrospective study design was conducted from the period of 1st of November, 2015 through 12th of May, 2017 in order to collect data related to assessing Post Traumatic Stress Disorder among Shengalian Internally Displaced Persons. A cluster simple random sampling of (400) subjects. A questionnaire was developed as a tool of data collection for the purpose of the study. Data were collected through using PTSD Checklist Civilian Version and adopting direct interview technique. Pilot study carried out to determine the content validity through the panel of (7) experts, and the reliability of the study's instrument was determined through application of test-retest reliability.

Analysis of data performed through the use of Descriptive and Inferential Statistical methods.

The findings of the study showed that the prevalence of PTSD among Shengalian IDPs in this study is (14.5%).

The study concluded that Post Traumatic Stress Disorder is more prevalent among female than male. The study also concluded that there was no association between Post Traumatic Stress Disorder and the other demographic characteristics such as (Age, Level of education, Occupation, Marital status and Religion).

The study recommended that establishing psychosocial care centers inside or close to the camps for management of psychological problems especially Post Traumatic Stress Disorder individuals will facilitate the way for them to visit and follow up their conditions.

Introduction: Post Traumatic Stress Disorder refers to symptoms that develop following exposure to a traumatic experience. Initially called "shell shock," it became more widely studied following the first two World Wars (Thompson, 2008). Though this diagnosis was also common throughout World War II, it became evident to psychiatrists that shell shock was not a scientifically appropriate psychological definition because it was missing a standardized psychiatric nosology, or "a system of classification based on lists of criteria features and Aristotelian principles of inclusion and exclusion" (Young, 1995). The traumatic event may consist of direct injury, witnessing events or that experienced by others for example automobile accidents, disasters, violent personal assault diagnosed with a life threatening illness or tortured, being kidnapped and threat by other to one's physical integrity. Events that witnessed can encompass seeing the serious injury or abnormal death of another person because of accident, violent assault, or serious injury and war or disasters (EMEA, 2008).

Post Traumatic Stress Disorder includes persistent recall of frightening

moments of the previous memories and thoughts, or mentally re-experiencing a terrifying event that causes the possession of severe anxiety, feeling of helpless, or frightfulness. Other Symptoms: Sleep disturbances, avoidance of areas or situations related to traumatic experience that remind the events, and easily horrible or scared; these symptoms mainly develop within three months after the traumatic situation, but sometimes may take several months or years later. Many persons with PTSD have trouble in discussing their symptoms due to that may embarrass or scare them when recall their trauma. This is common in victims of sexual abuse and war (Ali, 2015).

Post Traumatic Stress Disorder includes a group of symptoms that develop after exposure to a stressful event. The three symptom groups are (e.g., flashbacks, avoidance and hypervigilance), research propose that avoidance symptoms are the most distinctions of PTSD (Thompson, 2008).

According to trauma biography particularity of stressful event is very important for adapting with stressful event and may decide the outcome. Adapting measures is altered if the event or place is altered. Furthermore, adapting measures alters on the diverse stage of fearful situation, the measure that is adapted on the primarily phase of the stressful situation may be maladaptive on the later stage (Martskvishvili, 2010).

Post Traumatic Stress Disorder could begin at various stages for every person-experiencing trauma in their life and may adversely impact on a person by reliving the event that cause the stress. Primarily it is an emotional sickness can be classified as an anxiety disorder and it is due to a lifethreatening, frightening, or highly traumatic experience (Stearns, 2011).

For those who do continue to develop PTSD this may result in mental health problems, long-term behavioral problems, loss of employment, interpersonal problems, drug and alcohol abuse, physical behavioral problems and a lowering of immune functioning (Engelbrecht, 2013).

Large number of people come back to their 'normal state' after a stressful event as results of their pliancy. Some people stay on heightened level of stress reactivity and sympathetic arousal with frequently reexperience the traumatic event. Other symptoms that could come after the traumatic event include avoidance of the associated stimuli with the events and emotional numbing. If these symptoms continue for a longer time, these people can develop PTSD (Bonanno, 2004).

Importance of the study: Many years ago Iraqi communities exposed to a lot of violence, murder, vandalism and rape operations by terrorists and many of them died or exposed to physical, psychological and sexual abuse. The most heinous crimes they have suffered which carried out by Islamic State in Iraq and Syria (ISIS) criminal members at 3rd of August, 2014 in Shengal District, that lies in West of Nineveh Province. the district is (136)

km from Mosul city and distance between Shengal district and Duhok city is (119) km. citizens of Shengal city paid the biggest perdition because they subjected to kidnapping and captivity of women for sexual slavery with killing the elderly and young people in front of their families. These heinous crimes have led to the deterioration of mental and physical condition of many of Shengalian citizens. So, the emergence of PTSD for many of them, therefore the researcher decided that it is very important to apply study to Shengalian IDPs those resides inside the camps in Duhok Governorate because few researches are done on such people in order to assess the prevalence of PTSD among them for providing psychological and physical treatment, in addition to help them to cope with this disorder and preventing its consequences.

Especially the IDPs are suffering from the loss of popular and familial relationships, loss of jobs, homes and property, social security, and stability. In addition to that IDP's are not targeted for humanitarian helping because they have not passed national boundaries and they are not considered refugees (Yeomans, 2007).

Statement of the study:

Assessment of Post Traumatic Stress Disorder among Shengalian

Internally Displaced Persons

Objectives of the study:

1. To assess PTSD among Shengalian IDPs.
2. To determine the prevalence of PTSD among Shengalian IDPs.
3. To find out the association between PTSD among Shengalian IDPs and their demographic characteristics (Age, Gender, Level of education, Marital status and Religion).

Definition of the terms

Post Traumatic Stress Disorder

Theoretical definition

Post Traumatic Stress Disorder is an anxiety disorder that can take place after the witnessing or experience of a traumatic event (NC, 2010).

Operational definition

Post Traumatic Stress Disorder is psychological problem developed by Shengalian IDPs due to ISIS attack and they witness killing and kidnapping hundreds of their children, young and older individuals.

Internally Displaced Persons

Theoretical definition:

Internally Displaced Persons are persons or groups of persons who have been forced or obliged to flee or to leave their homes or places of habitual residence, in particular as a result of or in order to avoid the effects of armed conflict, situations of generalized violence, violations of human rights or natural or human-made disasters, and who have not crossed an internationally recognized state border (Newman, 2003).

Operational definition:

Internally Displaced Persons are those persons who were previously lived in Shengal District- Nineveh Governorate and then moved from their district or residency due to ISIS attacks that represented serious threaten to

their lives and their families and they are living now in camps in Duhok Governorate.

Chapter two Review of literature

History of PTSD: The American Psychiatric Association (APA) in 1980 officially recognized the PTSD and then added it to third edition of Diagnostic and Statistical Manual of Mental Disorder (Botello, 2015).

In the Freudian era, it was thought that traumatic experiences created memories in an exchange consciousness, and "because the memories are painful and unmanageable, the conscious personality wishes to banish them from awareness (Baily, 2014).

The idea was at the beginning debatable as the serious change brought about by the idea was the provision that the causative agent was outside the person (ex. a traumatic event) instead of a genetically person weakness (ex. traumatic neurosis) (Engelbrecht, 2013).

Epidemiology of PTSD: Study conducted by Gubinelli (2014), shows the prevalence of PTSD among the public population is from (8%) to (29-43 %) these with several mental illness. While, the PTSD life time prevalence in United States has been reported to be less with rating ranging between (6.81-7.8%) (Woidneck, 2012).

As reported by Gul (2014) after terrorist contravention, the PTSD ranges were stated as between (20%) to (40%) in community sample from Izmir, while among refugees greater than (50%). The researches executed among persons exposed to different kinds of violence reported (25%) of PTSD prevalence.

Research in 2007 showed the rate of PTSD among study participants in northern Uganda as (74%) similarly, to a research in 2004 studied ranges of PTSD among former Ugandan child soldiers reported that (97%) of the participants met the criteria of the diagnosis (Myovela, 2012).

Since women are more vulnerable to be exposed to traumatic events (five out of ten women report an experienced traumatic event) such as domestic violence or rape, they are not just at a greater danger than men to develop PTSD, but they are also more vulnerable to develop continuous symptoms of PTSD (Welsh, 2013).

Survey of national comorbidity in United States stated that a life time prevalence of PTSD rate is (5%) in male and (10.4%) in female (Hogberg, 2008).

As general explanation has been proposed by Bryant and Harvey (2003), and stated by Newell (2009), a gender is specific responses bias and/or biological differences. Furthermore, gender can not be considered a reliable predictor alone.

Types of PTSD: There are three types of PTSD as reported by Meng (2010)

A. Acute PTSD: The onset starts one to three months after trauma, and its symptoms last less than three months, this type of PTSD is called acute PTSD.

B. Chronic PTSD: Mean persistent symptoms of PTSD more than three months

C. Delayed onset PTSD: The symptoms manifest after six months of trauma.

Typical reactions to traumatic events: With stress, cortisol and adrenaline are secreted, that affect the emotional memories storage by stimulating the amygdala. Furthermore, in order to expect potential risk, 'stressful memories' are extremely adaptable and when suitable, play a key role in survival. However, when a traumatic event overwhelms the persons 'psychological defenses', she/he cannot return to her / his former condition of homeostasis (psycho-biological wellbeing). Instead of that a person develops increased stress reaction with sympathetic arousal (Wassmer, 2010).

Murburg and others (1995) reported that basal sympathetic nervous system (SNS) performance was not increased in PTSD patients and proposed that the increase of catecholamines indicated increased sympathetic reaction. Thus PTSD can be identified as an anxiety disorder with irregular balance of both inhibitory and excitatory impulses at the time of exposure to TraumaTrigger.

After exposure to traumatic events, the development of PTSD is depending on many factors that increase vulnerability such as (psychological, biological and social factors). These factors increase the risk of developing PTSD among vulnerable individuals (Dyb, 2005).

Post Traumatic Stress Disorder has been characterized as a multi system disorder including many neuroendocrine systems, which means that medications are of restricted effect in PTSD in comparison with panic, depression, etc. Secretion of catecholamines is enhanced, and cortisol secretion is decreased. The association of these results has been considered to give PTSD a singular neuroendocrine profile compared with other diagnostic groups (Søndergaard, 2002).

Comorbidity of PTSD with other disorders: Ranges of populations comorbidity with PTSD is high, about (79%) of women and (88%) of men with PTSD met the criteria for at minimal one other psychiatric diagnosis. The most popular comorbid diagnoses stated are (anxiety, depressive disorders, phobias, and substance misuse) (Newell, 2009). Furthermore the comorbidity between PTSD and many other disorders is dramatically high. Kessler et., al. (1995) suggest that there is (84%) range of comorbidity total. While Engelbrecht (2013) reported that PTSD has a (9.5%) comorbidity range with panic disorder, (31%) with substance abuse/dependency, (40%) with alcohol abuse/dependency, (28%) with social phobia, (29%) with conduct disorder, (9%) with mania and (48%) with major depressive disorder.

It is clear that PTSD may create functional impairment in many aspects as (behavioral, biological, psychological and attention mechanisms). However, there are a little researches which can confirm that comorbidities lead to the functional impairment to be worst, due to further disorders of PTSD may not result in functional impairment (Meng, 2010).

In case more than one psychological disorder is involved in researches on post traumatic events, PTSD is often treated as primary psychological disorder, because of its involved criteria of exposure to a traumatic experience. Comorbidity between PTSD and at least another one disorder consider rule rather than the exception (Backholm, 2012).

Recent studies reported that physical illness associated with PTSD, such as individuals suffering PTSD show higher rates of chronic general physical complaints and pain. As well as develop a higher rate disorder of (autoimmune, circulatory/cardiovascular, digestive, musculoskeletal, and

respiratory system) (Woidneck, 2012).

The biology of PTSD: Killeen (2011) reported that the brain is changed by events. "The brain is not just the "master controller" of stress reactions but it is the main target of their effects. Manageable stress resultant to biological alterations that simplify higher endurance, visibility power, immunity and determination. Exposing to severe stressors secrets exactly the same chemicals, but in increased quantities, and this destroy the brain and prohibit memory functions.

The uprising in neuroscience explained that psychological trauma enforces certain regions in the brain to become chronically over activated area and others under activated. Moreover, the level of arousal, capacity to selfregulate, and function of memory of many survivors from traumatic events stay abduct by the consequent of brain events that happened while suffering traumatic events or experiences (Lazar, 2013).

Through utilizing new methods of brain mapping Functional Magnetic Resonance Imaging with advances in psychopharmacology and neuroscience, recent researches showed that PTSD begins as a normal, general fear response to stress (Yehuda, 2002). Normally the amygdala is the first to determine the danger, stimulating the neuro-endocrine hypothalamus, pituitary gland and adrenal cortex axis. The end- stage will cause a greater secretion of cortisol, to compose of the stress-activated biological responses of the SNS (Kroch, 2009).

Theories related PTSD

Cognitive Behavioral Model in PTSD:

Cognitive models have tended to pay attention to alterations in the victim's automatic and strategic processing of information, memory functioning, unproductive avoidance strategies, lack of social support, challenged core believes, and criticism by either others or by self. One of main cognitive theory beyond PTSD is the pre-traumatic event that when individual experiences the traumatic event, the prior view about self and the world will be bearded and may be refuted. The change of the core of believes is believed to result in ineffective cognitive strategies of preventing, along with increased level of arousal in individuals suffering from PTSD (Myovela, 2012).

Other cognitive model of PTSD which is developed by Ehlers and Clark in 2000, and presented by Kingston (2012), suggest that PTSD becomes continuous in persons who processing of the traumatic event leads to a feeling of danger existing impendence as outcome of disorder in autobiographical memory and idiosyncratic negative valuation of the traumatic event and its sequelae. The impendence may be either external (e.g., the world is a dangerous place, people are dangerous) or internal (e.g., a threat to one's core view of oneself as a capable and/or acceptable person who will be able to achieve life's important goals).

The personal factors, environment, and inheritance also will have supposition in processing, experiencing trauma and crisis events in future (Rostami, 2012).

A more contemporaneous view of PTSD utilizes the theory that traumatic experience is caused by behaviorally conditioned scary reactions that result in evasion. Linked with a cognitive theory that the individual carries on an incorrect perception of the world as threatening place and a belief that she or he is disqualified in management the threatening is key components in the progress and continuation of PTSD (Killeen, 2011).

Information Processing Theory (IP) in PTSD:

The information processing model for PTSD explained that traumatic memories are processed in disconnected and distinguished way, and that deficient handling of such memories will result in the emergence of PTSD and or other psychological disorders. Likewise, the Anxious Apprehension Model, originally has developed for panic disorder, and also has been adapted with PTSD (Myovela, 2012).

Information-processing theories of PTSD concentrate on the storage, encoding, and recall of events that provoke of fear with their associated stimuli and responses. The focal concept is that inadequate processing of the traumatic experience lead to psychopathology and that the information of the traumatic experience needs to be integrated within the wider memory system (Kroch, 2009).

Behavioral model or learning theory in PTSD:

The known behavioral model is closely corresponding to the conditioning or learning theory beyond other anxiety disorders. Stimulus which are reminders or cues of the traumatic experience are prevented because of the scary and anxiety which they trigger. This prevention is restrengthen to a degree, although some studies have reported avoidance to be relatively inefficient in decreasing these unpleasant emotions (Myovela, 2012).

Conditioning theory of PTSD clarifies the method in which trauma cues gain the ability to trigger fear and how important avoidance is for the keeping of PTSD symptoms. This theory used the behavior two-factor learning-theory which has been developed for other anxiety disorders. A study suggests that during classical conditioning, neutral stimuli which were existing at the traumatic status become provoker of fear through their combination with the unconditioned stimulus (Kroch, 2009).

Risk factors of PTSD

Not all trauma survivors develop PTSD, As a result, much attention has been paid to the factors that make a person vulnerable (or protect them from) developing this disorder (Wohlfarth, 2002). Three Broad Risk Factor Categories of PTSD are:

Pre-Trauma Factors**Individual-related risk factors****History of Trauma - Prior trauma:**

Especially where PTSD developed, makes individuals especially susceptible to repeated bouts of PTSD. This is likely due to the ease with which unresolved past traumas are recalled and re-experienced, as well as the likelihood of reenacting past faulty coping behaviors (Schiraldi, 2000).

Life Stressors

Recent events in a person's life that are not of traumatic magnitude (e.g., job loss, divorce, financial problems) can weaken the person's defenses against trauma-induced stress in the same way that hardship can weaken the immune system (Schiraldi, 2000).

Poor Coping Skills

Deficits such as low self-esteem, emotionality, and resilience can increase

a person's chance of developing PTSD. The advantage of this set of vulnerability factors is that they are all learnable. In fact, suffering through PTSD can actually promote improvement of these deficits (Schiraldi, 2000).

Personality:

Certain long-standing traits, such as pessimism and introversion, deny a person the tools needed to deal with a challenging affliction such as PTSD. These, too, are modifiable, but not to the same degree as coping skills (Schiraldi, 2000).

Genetics:

It appears that vulnerability to PTSD can be passed on through generations, and worsened by certain behaviors such as drug abuse and trauma experience (Schiraldi, 2000).

Brain Structure:

The hippocampus, which plays a role in learning and memory, has been shown to be damaged in PTSD sufferers (Durand, 2006). Similarly, research on rodents and primates indicates that stressful stimuli can induce adverse functional and structural changes in the hippocampus. Decreased hippocampal volume results when excessive stress alters the chemical regulation in the brain, which harms the functionality of systems such as learning and memory. The chemicals implicated in this structure mutation include glutamate, GABA, norepinephrine, serotonin, and cortisol. A host of other chemicals and structures are thought to play a role in PTSD (Nutt, 2000).

Family related risk factors:

Healthy family setting can provide a child with good protection from PTSD. In family dynamics, the child can learn effective coping strategies, develop self-confidence, and most importantly, establish a solid, loving support system to protect them. Often learning through role-modeling, a child of a divorced family may witness behaviors and thoughts that are detrimental to their mental health (mistrust, blaming of others) (Schiraldi, 2000).

Family History

Family history of anxiety can predispose an individual to PTSD, which itself is an anxiety disorder (Durand, 2006). Likewise, a family history of PTSD and trauma may predispose family members to the disorder. Often, parents who have been trauma victims will teach their children maladaptive methods of coping with these stressors. These parents might also be emotionally unsupportive as a result of their distressing experiences, leaving their children with a lack of support which predisposes them to PTSD.

Peri-Trauma Factors

Traumatic event is more likely to adversely affect the victim if, in the initial period following the event, he or she (1) dissociates, (2) believes that they are responsible in some way or did not do all they could to remedy the situation as it occurred, and (3) feels alone or isolated. Each of these

conditions creates artificial separation from or unnecessary shame in regards to the event (Schiraldi, 2000).

Severity of Trauma:

With low-level stress or trauma, personal vulnerabilities weigh more heavily in determining the development of PTSD (Durand, 2006).

Proximity to Trauma:

Person's proximity to a trauma has been found to be directly related to their degree of resulting distress and PTSD development. An interesting demonstration of this phenomenon was found in the 1987 study of children at a Los Angeles elementary school who survived a sniper shooting at their playground. The closer the children were to the playground (where the bullets were fired, some were killed, and many were injured), the higher their reported stress reaction scores and incidence and severity of PTSD (Pynoos et al., 1987).

Type of Trauma:

Trauma type (e.g., sexual assault, natural disaster) interacts with various other factors (e.g., age, gender, trauma severity) to reveal differing susceptibilities to PTSD per type.

Nature of Trauma:

A victim's vulnerability to PTSD increases if the trauma is sudden, unpredicted, enduring, or recurring. Also, the risk of developing PTSD rises if the event poses a real threat of harm to the victim, if the trauma is multidimensional (potential harm in multiple ways, e.g., natural disaster followed by drought), and if the trauma occurs early in life (here, the trauma has a more profound effect on developing personality) (Schiraldi, 2000).

.8.3. Post-Trauma Factors

2.8.3.1. Lack of social support

The most crucial protective factor from PTSD after a trauma is the ability to rely on family, friends, and community to prevent isolation and distract the victim from the traumatic memories. Often others are unavailable because they too experienced the trauma or perhaps because of their lack of connection with their own emotions. Seemingly supportive individuals sometimes make the victim feel that they should "just get over it" (Briere, 2004).

Blaming the Victim

For whatever reason, some victims of trauma (most notably rape victims) are shamed or disbelieved in regard to the occurrence of the event. This rejection serves only to compound the distress of the victim. Another prime example of this was the reception of Vietnam veterans after the war. On top of the "shell shock" they were struggling with, the soldiers had to deal with a public disapproving of the war for which they sacrificed (Schiraldi, 2000).

Secondary Victimization

This occurs when those who are supposed to help victims in the posttraumatic period actually worsen the stress by subtly blaming the victim. An example is when police officers might ask a rape victim if she thinks the crime could have been prevented had she worn less revealing clothes (Schiraldi, 2000).

Lack of Treatment

Whether intentional or ignorant, not seeking treatment further isolates the victim and allows PTSD to progress chronically (Schiraldi, 2000). Current research estimates that only 38% of PTSD sufferers are undergoing treatment during a given year, the most popular reason for not seeking treatment was that they did not think they had a problem, this treatment rate, however, is comparable to or higher than the same rates of treatment for depression and anxiety related disorders (Kessler, 2000).

Peri-traumatic emotional responses in which Individuals who explained having powerful negative emotional responses (as guilt, fear, shame or horror) throughout or after the traumatic experience show higher level of PTSD (Ozer et., al in 2003).

Impact of multiple or repeated trauma are also considered as risk factor for PTSD because recurrent or chronic traumatic life experiences increases both the risk of presenting more severe symptoms of PTSD and also affect the development of many psychiatric disorders. Likewise, persons have PTSD mainly show at least one of comorbidity diagnosis (Lesishman, 2013).

An overviews and meta-analyses were concluded that some risk factors seem to be more central in their role. At the beginning, risk factors include young age at the time of the trauma, female sex, low socioeconomic status or educational level, a history of brain injury, with individuals/family psychiatric history, or previous exposure to trauma. Central risk factors during the unfolding trauma events include the nature of the events, like a crisis with extra grotesque content, or person was directly oriented threatened instead of only witnessing the threat, both of them associated to more symptoms-related PTSD. (Backholm, 2012).

National Institute of Mental Health (2013) and Mayo Clinic (2013) mentioned that the following factors may act to increase the risk of PTSD:

- 1.Female gender.
- 2.Experiencing extreme or long-lasting traumatic event.
- 3.Experienced other traumatic event earlier in life.
- 4.Having few or no social support after the traumatic experience.
- 5.Having other psychological health problems, such as depression or anxiety.
- 6.Lacking a good support system from friends and family.
- 7.Having first-degree relatives with psychological health problems, including PTSD.
- 8.Having first-degree relatives with depression.
- 9.Having been abused or neglected as a child.

While the arguments are mixed with the role of severity level of traumatic event in the progressing of PTSD study has reported that the progressing of the disorder is extremely related to a number of persons (pre trauma) risk factors, including neuroticism, intelligence, and anxiety or preexisting mood disorder (Herbert and Forman, 2006).

Causes of PTSD:

The accurate cause of PTSD is unknown yet. PTSD is a result of exposure to traumatic experience. Situations in which the individual feels severe scare, horror or helplessness are considered traumatic. Besides, PTSD has been showed in persons who exposure to rape, earthquakes, war, physical assault, fire, attacks of terrorism accidents, sexual abuse, family and community violence (Alsaeed & Abdullah, 2007).

Someone can develop PTSD when he/she goes through, learning or seeing an event that causes severe fear, horror or helplessness. Physicians are not assured why some individual get PTSD. As with most psychological health problems, PTSD is possibly caused by a combination of: (MyoClinic, 2012)

1. Increased risk of depression and anxiety as inherited mental health risk.
2. Severity and amount of trauma the patient exposed to as a life experiences since early childhood.
3. The inherited aspects of personality (mainly called temperament)
4. The way in which the brain controls the hormones and chemicals that the body secretes in response to stress.

Symptoms of PTSD:**PTSD symptoms as reported by (Kinchin, 2005)**

1. Sleep disturbances includes nightmares and early waking.
2. Re-experience memories which you are capable to switch off.
3. Memory impairment, forgetfulness, incapability to recall names, facts and dates that are well known to you.
4. Deteriorated concentration.
5. Impairment of the ability to learning.
6. Hyper vigilance (feels like but is not paranoia).
7. Extremely startle response.
8. Sudden intense anger, Irritability and occasional violent outbursts.
9. Panic attacks.
10. Hypersensitivity, whereby every remark is recognized as critical.
11. Obsessiveness the traumatic experience takes over the person life, and cannot bring out of mind.
12. Pain in joint and muscle with no clear cause.
13. Nervousness feeling.
14. Reactionary depression (not endogenous depression).
15. Extreme levels of embarrassment and shame.
16. Survivor feels guilty for having rescued when others crushed or for not having done more to help or rescue others.
17. A feeling of having been given a second opportunity at life.
18. Unnecessary fear.
19. Shattered self-confidence and Low self-esteem.

20. Anhedonia (inability to feel love or joy) and emotional numbness.

21. Feeling of disengagement.

22. Avoidance of anything that leads recall traumatic experience.

23. Mental and physical paralysis at any recall of the traumatic experience.

A recent study on individuals exposed to extremely traumatic events indicates that hyper arousal and intrusion are the most commonly indorse symptoms of PTSD. In contrast with numbing symptoms and avoidance are the least frequently symptoms yet, also are known to serve as possible indicators for PTSD and other comorbid psychiatric health problems

(Villarreal, 2012).

The symptoms of PTSD are varied and can involve intrusive flashback aspects of the traumatic experience, hyper vigilance or increased physiological arousal and avoidance of numbing of emotions or reminders of the events (Kingston, 2012).

To deliver a diagnosis of PTSD, a person should have at least one reexisting symptom, at least two hyper arousal symptoms with at least three avoidance symptoms for a no less than one month that can last a lifetime (Toscano and Roberts, 2014).

Diagnostic criteria for PTSD:

Table (2.2) DSM-IV Diagnostic criteria reported by (Leishman, 2013)

List	Diagnostic criteria	Notes
A	The individual has been exposed to a traumatic experience in which both of the following were existing: 1-The individual witnessed, experienced, or was faced with a traumatic event or events that involved threatened or actual death or threat to the physical integrity or serious injury of self or others. 2-The individual response included helplessness, severe scary, or horror.	Note: In children, this may be expressed instead by agitated or muddled behavior.
B	The traumatic experience is constantly flashbacked in one (or more) of the following ways: 1-Frequent and intrusive stressful memories of the traumatic event, including thoughts, images or perceptions.	Note: In young children, recurrence play may happen in which aspects or themes of the trauma are expressed.

List	Diagnostic criteria	Notes
B	2-Frequent painful dreams of the traumatic event. 3-Feeling or acting as if the traumatic experience was happening again (includes hallucinations, illusions, a feeling of reliving the traumatic experience, and dissociative flashback episodes, including those that occur on both when intoxicated or awakening). 4-Severe psychological distress at the time of exposure to either external or internal evidences that resemble or symbolize an aspect of the traumatic experience 5-Physiological reaction when exposure to external or internal evidences that resemble or symbolize an aspect of the traumatic experience.	Note: In children, there may be terrifying dreams with unrecognizable content. Note: In young children, specific reenactment of trauma may happen

List	Diagnostic criteria	Notes
------	---------------------	-------

	Constant avoidance of stimuli-related both of numbing of general responsiveness and trauma (not reported before the traumatic event), as recognized by three or more of the following: 1-Attempts to prevent thoughts, conversations or feelings-related trauma 2-Attempts to avoid places, activities, or people that trigger recollections of the traumatic event 3-Inability to remember a significant particular part of the traumatic event 4-Clear noticeable decline participation or interest in important activities 5-Feeling of estrangement or detachment from others 6-Limited range of affection (such as inability to have loving feelings). 7-Feeling of a foreshortened future such as does not look forward to have marriage, career, children, or a normal life span.	
C		
List	Diagnostic criteria	Notes

D	Consistent increased arousal symptoms (not reported before the trauma), which manifested by two or more of the following: 1-Difficult to staying asleep or falling 2-Outbursts of anger or Irritability 3-Difficult in concentrating 4-Hyper arousal 5-Excessive startle response	
E	Duration of the disturbance (symptoms duration in Criteria B, C, and D) lasts more than one month.	
F	The disturbance leads to a significant clinically distress or functioning impairment such as occupational, social and other important areas.	
Specify if:		
Acute:	when duration of symptoms lasts less than three months.	
Chronic:	When duration of symptoms lasts more than three months or more.	
With Delayed Onset	When initial of symptoms is at minimum six months after the stressor event.	

Some persons may not meet the total criteria specified in DSM-IV (APA, 2000) for diagnosis of PTSD but not with standing suffering from stressful symptoms. Furthermore, victim can be considered as to have subsyndromal PTSD (Newell, 2009).

Treatment of PTSD:

Eye Movement Desensitization and Reprocessing (EMDR)

This type of the treatment is where the patient envisage the re-existing traumatic experience and the therapist moves his finger quickly back and forth in front of them. The quick movement in integration with flipping of the hands or changing noise in their ears will provoke the senses of both sides of the brain (Stearns, 2011).

Eye Movement Desensitization and Reprocessing includes the patient concentrating on negative memories of trauma when engaged in a task including some form of bilateral stimulation, (such as eye movements until

distress has diminished and the belief in high positive thoughts about trauma has elevated. Management of stress does not concentrate on the traumatic event, but includes the victim's learning skills to facilitate manage anxiety. Such skills consist of relaxation techniques, abdominal breathing, and distraction techniques, learning to use positive statements and self-talk strategies, and assertiveness trainings (Kniss, 2012).

Neuro-Linguistic Programming

This type of treatment methods depends on how we recognizes things through the five senses and treatment is modulated accordingly (Stearns, 2011).

Thought Field Therapy

This is a way of blocking the stream of energy that is generated through disturbing thoughts of the traumatic event. It is actual relief of anxieties and fears combined with the traumatic event (Stearns, 2011).

Trauma Incident Reduction

This type of treatment is designed to a person on one plan that is excessively structured and designed to remove the negative effects of the traumatic event (Stearns, 2011).

Prolonged Exposure

Prolonged exposure (PE) to stimuli combined with the experience of original trauma is a way of treatment that can be provided to patient as a willing to participate. The resilient and presumably very individualized use of this type of treatment has been successful when considering relationship patterns (Stearns, 2011).

Prolonged exposure is thought to be "effective in reducing symptoms of PTSD and in maintaining the reduction of symptoms months later after treatmentQ (Lazar, 2013).

The therapist in exposure therapy, brings back the event-related imagery in safe place. The patient is step by step guided through this imagery. Re-experiencing the traumatic event under controlled environment can assist the patient drop out of the fear and acquire control over the anxiety (Riley, 2012).

Cognitive Behavioral Therapy

The Cognitive Behavioral Therapy (CBT) is a model has been designed for assessment and treatment planning with putting into consideration the individual and distinctive areas of their personality and life events. This type of treatment needs a plan analysis and identify the best way toward the person rather than of a customary subjective methods developed by the therapist (Stearns, 2011).

Many recent studies propose that short-term CBT, delivered through two to four weeks post-trauma, is effective in minimizing symptoms and prohibiting the progressing to a chronic course. Distinct from debriefing programs, which target every person who experiences a traumatic event, these CBT programs directed toward only persons who are developing a significant clinical symptoms at least two weeks after the trauma. (Herbert and Forman, 2006).

Cognitive behavioral therapy for individuals with Concurrent Disorder (CD) includes determining maladaptive cognitions positive thoughts generating alternative realistic, in addition to performing techniques for thoughts-related challenge in conditions that have a tendency to trigger mental health symptoms and/or engage in substance use (Venos, 2015).

Pharmacological therapy

The most efficient pharmacological drugs that have been reported for avoidance cluster symptoms are Selective Serotonin Reuptake Inhibitors (SSRIs): Tricyclic antidepressants and Monoamine Oxidase Inhibitors (MAOIs) have been explained as possessing the most effect on re-developing cluster symptoms. Contrariwise, antipsychotics drugs have been viewed as being not effective as a universal PTSD treatment and must be considered as the last choices, it's uses are for cases of severe hyper arousal and aggressiveness (Ogburn, 2015).

In spite of many researches related to the pharmacotherapy on PTSD such as anticonvulsant, prozosin, and novel antipsychotics (olanzapine and risperidone), these researches were considered either as low quality or doubtful efficiency on PTSD by committee on PTSD treatment, in fact, a few number of medications for PTSD which are approved by Food and Drug Administration (FDA). So, just two medications which are approved by FDA are SSRIs as (praxetine and sertraline) (Meng, 2010).

Group therapy

Group therapy is another way of treatment for PTSD; As group therapy, all PTSD individuals are stimulated to share their experiences with a group of individuals who also experienced to a traumatic event and having PTSD. This method of treatment can provide PTSD patients best coping with their memories, symptoms, and other parts of their lives (Kwan and Tan, 2008).

Group therapy has been vastly practiced in clinical aspects and provides social contact, social support, and social learning throughout modeling. It is beneficial for building healthy trusting relationships and recapturing a sense of interpersonal security. For those with PTSD, these skills are particularly helpful in dispelling the feelings of detachment and alienation that are widespread PTSD symptoms (Twist, 2015).

As long as of PTSD treatment, the psychodynamic methods have been used for trauma and have been historically used to PTSD or for differential diagnoses. In fact, the core of psychoanalytic psychology is the effect of traumatic events. However, empirical study is limited, may be unsurprisingly, as Freud's work depends highly on a restricted selection of case studies, those studies reported that the effect of psychodynamic therapy is comparable to other modes, Remarkably outcomes after post-termination results look like to be higher with psychodynamic methods, but actual findings are lower when compared to other modes (Ogburn, 2015).

Nursing interventions for PTSD:

Nurse specific behaviors that considered useful by clients which are reported by Repo (2014)

1. Making eye contact.
2. Sitting near the client.
3. Not rushing.
4. Active listening.
5. Talk that distracted and reassured.
6. Being touched by the nurses.
7. Being given options (like having only female care providers, and having the procedures explained to the client enabling the survivors to feel safe in the clinical setting and in control of the process).
8. Women also mentioned the importance of feeling validated in

their emotional response to the stressful situation as being normal.

After the rapist, the Nurse will be the next person to have close intimate, interaction with the patient who exposed to the traumatic experience as well as, can set the course for recovery and healing when the victim seeks this type of medical treatment (Galgano, 2006).

It is mandatory that the nurse establishes trusting relationship with the patient and believes their statement regarding the traumatic event that took place. The nurse must reassure that she or he is not at fault to any degree. Nurses should be reminded that they require to approach each victim's case with a non-judgmental opinion without dropping any accusing valuation that has been at fault or mistake. These activities are proportionate with preventing any negative social reactions such as distraction stigmatization that may maximize the impact of PTSD symptoms (Galgano, 2006).

Chapter Three Subjects and Methods

Administrative arrangements

Prior to the data collection, approval was obtained from the followings: (attached in Appendix A1 to A3)

1. College of Nursing/ Duhok.
2. General Directorate of Health in Duhok.
3. Board of Relief and Humanitarian Affairs (BRHA).
4. Camps managements.
5. Scientific committee in Faculty of Medical Sciences/University of Duhok.
6. Verbal agreement was obtained from subjects of the study before initial data collection.

Design of the study

A descriptive, retrospective study design is adopted in order to assess PTSD among Shengalian IDPs. This study design is applied from the 1st of November, 2015 through 12th of May, 2017 to people who were exposed to the terrorism of Islamic State in Iraq and Syria (ISIS) at 3rd of August, 2014 and they were living in Shengal District.

Setting of the study

The study is conducted among Shengalian IDPs who reside in camps in Duhok Governorate. The total number of the Shengalian camps in Duhok governorate was 16 camps in different locations and the study conducted in seven of these camps includes (Cham meshko (Zaxo), Kabarto 2 (Summel), Khanki (Summel), Sharya (Summel), Esyan (Sheikhan), Mamlyan (Akre), and Dawodeya (Amedi)). (Appendix B). These camps were selected as clusters by simple random sampling and the sample of the study which consists of (400) subjects were divided among these seven camps through sample and sampling and by calculation and statistical ways to determine the requested number of samples for every camp and then these calculated numbers of samples were divided again among the sectors inside each camp.

Sample of the study

Sample of the study was consisted of (400) subjects, within ages from 12 years old and above, and they were Shengalian IDPs.

The study sampling

Data were collected through adopting the cluster simple random sampling methods as presented below. During the period of 8th of May, 2016 to 11th of September, 2016

The camps were selected as clusters through the using simple random sampling as lottery process.

The researcher covered all sectors in each camp, then the tents selected randomly by pulling three or four numbers from a bag randomly to determine the tent number.

The participants were selected by putting the first letter of each family member from 12 years old and above in a bag with respect to the first letter duplication in their names, and then one of them pulled randomly.

The criteria for selecting the samples:**Inclusion criteria:**

1. Shengalian IDPs.
2. Participant aged from 12 years old and above.
3. Both genders
4. All religions

Exclusion criteria:

1. IDPs with chronic medical diseases.
2. IDPs with severe mental disorders and intellectual disability.
3. Those participants who are not present at home in camp during the interview.

Data collection

The data collection is carried out between the periods of 8th of May, 2016 to 11th of September, 2016.

3.8. Tools of the data collection

The tools that used for data collection are consisted of two parts. The first part is consisted of socio-demographic data for each participant involved in the present study as (Age, Gender, Level of education, Occupation, Marital status, and Religion), the second part is standardized international PTSD checklist civilian version (PCL-C).

The questions in the checklist were rated as: (1-Not at all, 2-A little bit, 3-Moderately, 4-Quite a bit, and 5-Extremely). (Appendix C).

The validity of the tool

The validity of the study questionnaire is determined initially through the panel of (7) experts working in different places and having different specialties which include (four faculty members from university of Duhok/ College of Medicine, one member from Sheikhan Polytechnic College of Health, one member from Azadi Teaching Hospital/Psychiatric Department in Duhok Governorate, and one member from General DOH in Duhok Governorate) (Appendix D). The experts were asked to review the entire questionnaire for content clarity, relevancy and adequacy and the majority of the experts agreed with the questionnaire while others suggested to makes few modifications in some items of the questionnaire and the modifications were made according to their opinions and valuable

suggestions.

Reliability of the instrument:

Sample of 20 individuals selected from Shengalian IDPs who reside in the camps with respect to the criteria for selecting the sample. The researcher make first interview and after a break for about half to one hour another psychiatric nurse made second interview with the same subject or participant and he asked him/her the same questionnaire and there was 15 persons refused to participate in the present study each one for different reason. The reliability of the instrument calculated through application of Pearson correlation Coefficient. The result was good reliability $r = 0.986$.

Limitations of the study:

1. Transportation difficulties of the researcher during data collection.
2. Costs of the research.

PCL-C administration and scored

The PCL-C was used as direct interview tool that read and filled out by researcher. The time that spent for each interview was ranging from 15-30 minutes.

The PCL-C is scored in three methods (NC, 2012)

A total symptom severity threshold method scoring

Severity score (range = 17-85) was gained by summing the scores of each 17 items that have reaction choices ranging from 1 "Not at all" to 5 "Extremely". The cut off for total score to consider Positive PTSD is 44 as a threshold for general population and if less than 44 is considered Negative PTSD.

Symptom Pattern method

If the person meets DSM-IV symptom criteria as defined by at minimum 1 B item (questions 1-5), 3 C items (questions 6-12), and at least 2 D items (questions 13-17) is considered symptomatic PTSD and if it did not meets these criteria is considered asymptomatic PTSD.

Combination of the above two methods

It is combining the two methods (1) and (2) to know if the person meets one method or both methods (symptom pattern method and severity threshold method).

Statistical methods

Statistical methods that used for analyzing the present study data are Descriptive Statistical method as (Frequency, Percentage, Mean and Standard division) and Inferential Statistical method such as Chi square with probability value (0.05.) The above statistical methods were done through the using of Statistical Package for Social Sciences (SPSS) program version 20.

Chapter Four Results

Chapter Four Results

Age of displaced person	F	%	Mean	S.D
12-21 Years	130	32.5	31.12	±
22-31 Years	124	31.0		15.533
32-41 Years	57	14.2		
42-51 Years	42	10.5		
52-61 Years	24	6.0		
62-71 Years	17	4.2		
72 and above year	6	1.5		
Total	400	100		
Gender of displaced person	F	%	Mean	S.D
Male	202	50.5	1.50	±0.501
Female	198	49.5		
Total	400	100		
Level of education of displaced person	F	%	Mean	S.D
Illiterate	189	47.2	2.45	±
Read & write	25	6.2		1.523
Primary school	46	11.5		
Secondary School	98	24.5		
College and	42	10.5		
Higher graduate	400	100		
Total				
Employment status of displaced person	F	%	Mean	S.D
Unemployed	114	28.5	3.60	±
Governmental	46	11.5		2.009
employed	12	3.0		
Private	26	6.5		
Farmer	123	30.8		
Housewife	76	19.0		
Student	3	0.8		
Retired	400	100		
Total				
Marital status of displaced person	F	%	Mean	S.D
Married	228	57.0	1.50	±
Single	161	40.2		0.708
Divorced	2	0.5		
Separated	2	0.5		
Widow	7	1.8		
Total	400	100		
Religion of displaced person	F	%	Mean	S.D
Ezidian	389	97.2	1.03	±0.185
Muslim	10	2.5		
Christian	1	0.2		
Total	400	100		

F= Frequency

S.D=Standard deviation %= Percent

Table 4.1 shows that the large number of the age of the study subjects was distributed between (12-21 and 22-31 years) (130) (32.5%) and (124) (31.0 %) respectively with (mean 31.12 and SD ± 15.533). While their gender approximately equally distributed between males and females. Furthermore near half of them were illiterate (189) (47.2%), one third of them were housewives (123) (30.8%). Also more than half of them were married (228) (57.0%). Finally the majority of them were Ezidian (389) (97.2%).

Table 4.2: Prevalence of PTSD among Shengalian IDPs

Symptom pattern method	F	%	Mean	S.D	Severity threshold method	F	%	Mean	S.D
Asymptomatic	275	68.8			Negative	335	83.8		
Symptomatic	125	31.2	1.31	± 0.464	Positive	65	16.2	1.16	± 0.353
Total	400	100			Total	400	100		

S.D	Combination of both the symptom pattern and severity threshold methods	F	%	Mean	S.D
	Meet one method	342	85.5		
± 0.369	Meet both methods	58	14.5	1.14	± 0.353
	Total	400	100.0		

F= Frequency

%= Percent

The above table revealed that the prevalence of PTSD among Shengalian IDPs, (125) (31.2%) as symptomatic PTSD and (65) (16.2%) of them have positive PTSD. While, (58) (14.5%) meet both methods for diagnosis of PTSD.

Table 4.3: Association between PTSD among Shengalian IDPs and their age

Combination of both the symptom pattern and severity	Total	df	P.value
--	-------	----	---------

	threshold							severity threshold					
	Meet one method	Meet both methods						Meet one method	Meet both methods				
Age	12-21	109	21	130	6	0.226**	Level of education	Illiterate			4	0.521*	
	22-31	111	13	124				Read & write					
	32-41	50	7	57				Primary school	159	30			189
	42-51	37	5	42				Secondary School	19	6			25
	52-61	17	7	24				College and Higher graduate	41	5			46
	62-71	13	4	17					86	12			98
	72 and above	5	1	6					37	5			42
	Total	342	58	400									
* Chi Square						df=degree of freedom							
Total								342	58	400			

* Chi Square

df=degree of freedom

** Fisher exact test

P=probability

This table indicated no significant association between PTSD among Shengalian IDPs and their age.

Table 4.4: Association between PTSD among Shengalian IDPs and their gender

	Combination of both the symptom pattern and severity threshold		Total	df	P.value
	Meet one method	Meet both methods			
Gender	180	22	202	1	0.038*
Female Male	162	36	198		
Total	342	58	400		

* Chi Square

** Fisher exact test

This table depicted a significant association between PTSD among Shengalian IDPs and their gender.

Table 4.5: Association between PTSD among Shengalian IDPs and their level of education

	Combination of both the symptom pattern and severity threshold	Total	df	P.value
--	--	-------	----	---------

* Chi Square

** Fisher exact test

This table presents no significant association between PTSD among Shengalian IDPs and their level of education.

Table 4.6: Association between PTSD among Shengalian IDPs and their occupation

	Combination of both the symptom pattern and severity threshold		Total	df	P.value
	Meet one method	Meet both methods			
Unemployed	101	13	114	6	0.062**
Governmental employed	41	5	46		
Occupation	10	2	12		
Farmer Private	22	4	26		
Housewife	98	25	123		
Student Retired	69	7	76		
	1	2	3		
Total	342	58	400		

* Chi Square

** Fisher exact test

This table shows no significant association between PTSD among Shengalian IDPs and their occupation.

Table 4.7: Association between PTSD among Shengalian IDPs and their marital status

	Combination of both the symptom pattern and severity threshold		Total	df	P.value
	Meet one method	Meet both methods			
Married	194	34	228	4	0.153**
Single	141	20	161		
Divorced	1	1	2		
Separated	2	0	2		
Widow	4	3	7		
Total	342	58	400		

* Chi Square

** Fisher exact test

This table shows no significant association between PTSD among Shengalian IDPs and their marital status.

	Combination of both the symptom pattern and severity threshold		Total	df	P.value
	Meet one method	Meet both methods			
Ezidian	332	57	389	2	1.0**
Religion	9	1	10		
Muslim	1	0	1		
Christian					
Total	342	58	400		

Table 4.8: Association between PTSD among Shengalian IDPs and their religion

* Chi Square

** Fisher exact test

This table indicates no significant association between PTSD among Shengalian IDPs and their religion.

Chapter five Discussion

Socio demographic data of the sample study

The findings of the present study shows that most of Shengalian IDPs age is within (12-21) years. This result is due to the large number of older Shengalian were engaged in work at the day time.

Regarding to subjects gender the present study reveals that the males and females are to some extent equally distributed for both genders. This results are supported by BRHA Executive Directorate / Duhok Governorate shows that the number of the males is 49.2% while the females are 50.8%.

According to results that presented by this study the large number of level of education for displaced Shengalian individuals is within illiterate level. That's why of more Shengalian left school learning and prefer to work in farming because of the Shengal farming nature.

With respect to employment status of study subjects. The large number of them was housewives. This result is due to those who stay in the tents in the camps are housewives and others work outside of camps at the day time.

Based on the findings of the present study more than half of Shengalian IDPs were married. Regarding to their marital status the large number of the subjects of the study was within the age of marriage.

The present study reveals that the majority of Shengalian IDPs who are resident in the camps were Ezidians. These results are supported by BRHA Executive Directorate / Duhok Governorate. Shows that 78.54% of Shengalian IDPs those resident in camps were Ezidians.

Unfortunately and due to scanty formal information and researches on Shengalian IDPs the researcher used his opinion and rational to interpret the above results.

Discussion of prevalence of PTSD among Shengalian IDPs

As indicated by the process of assessing the prevalence of PTSD and analyzing of data by multi methods of symptoms pattern method and severity threshold method in present study the results that emerged 14.5% of Shengalian IDPs those resident in the camps developed PTSD through meeting both methods.

Research has been conducted by Sabri (2008) in Erbil on internally displaced people in order to measure the prevalence of PTSD among youth documented that 26.5% of them match the symptoms of PTSD.

Further, study established by Tekin et.,al. (2016) on 238 Ezidians moved to Turkey documented that 42.9% of them met the diagnostic criteria of DSM.IV for diagnosis of PTSD.

Moreover, researchers analyzed psychiatric assessments of psychiatric health problems on Ezidians children and adolescents those arrived at refugee camps after threatening their life by attack of ISIS terrorists. This analysis reported that PTSD consisted (10.5%) of other psychiatric problems that distributed among children and adolescents who settled in refugee camps (Ceri et.,al, 2016).

In addition to all above, Abou-Saleh and Mobayad (2013) reported in their study that the prevalence rates of PTSD among adult were ranged from 36% to 62% of those refugees experienced Traumatic events.

The fluctuation in the prevalence of PTSD among displaced individuals, has been justified by the researcher by the fact that the present study is conducted after two years of ISIS attack on Shengalian those are

witnesses and experienced traumatic events, that is why they left their homeland seeking for save land in camps. Therefore the prevalence of PTSD to some extent may be changed among them because of coping and receiving psychological interventions.

Discussion the association between PTSD among Shengalian IDPs and their demographic characteristics

The present study reveals that the age of Shengalian IDPs did not impact on the developing of PTSD among them.

This result goes with study done by (Ö zdemir et.,al.2015) among 317 undergraduate students in Turkey which stated that age of victim did not significantly associate with PTSD symptoms.

Another similar study done by (Frans O, 2003) on 3000 subjects randomly selected from general population in Uppsala, Sweden which mentioned that age had no any impact on prevalence of PTSD.

Sana and Khattak, 2014 stated in their study which was done in Banda Sheikh Ismail, Nowshera District that age of people who exposed to traumatic events has no correlation with developing PTSD among them.

However, disagreement was showed in the study conducted by Azuo (2016) among Ezidians women who escaped from ISIS capture which showed that PTSD was more prevalent in younger Ezidian women.

This result is due to the fact that this study focused more on young women who survived from ISIS captivity.

Regarding to the association between PTSD and gender of Shengalian IDPs, the present study shows that the females were more affected by PTSD.

Similarly, a study research reviewed 25 years of research and discuss the difference in rate of PTSD related gender, confirmed that the females were more likely to develop PTSD after exposure to traumatic event than male (Tolin and Breslu, 2007).

Further document studied the PTSD among risk populations showed rates of prevalence of PTSD ranging from 3%-58% and the women are two times likely to present PTSD when comparing to men (EMEA, 2008).

In addition, results emerged through a study established by Kessler et.,al. (1995 cited in Engelbecht 2013). Found that women are 20.4% at risk of PTSD after trauma compared to men 8.1%.

Other agreement presented in study by Tekin et., al. (2016) on 238 individuals of Iraqi Ezidians refugees to Turkey which indicated that the women suffered PTSD more than men.

In contrast with previous results, study done by Myovela (2012) among Institutionalized Orphans in Dar Es Salaam, Tanzania indicated that there was no significant difference in developing PTSD between males and females after experience traumatic events.

As presented by this study the level of education of Shengalian IDPs has no any role in emergence PTSD.

Similar findings were showed by Ali (2015) in his study on IDPs in Kurdistan region of Iraq, the results of the study indicated that there was no significant difference between the psychological problems in association to educational level.

Another study done by Azuo (2016) on 100 Ezidians women who escaped from ISIS capture, the results showed no significant difference between

the groups of PTSD participants in accordance with their level of education.

In addition to the above studies, further study done by Tagurum et al., (2015) among 204 respondents population of a state in North-central Nigeria supports our results through showing no statistically significant association between PTSD and their educational levels.

Beside to all supportive study results achieved by Frans (2003) on 3000 subjects randomly selected from general population in Uppsala, Sweden which showed that educational level had no any effect on prevalence of PTSD.

On the other hand study stated that individuals are more likely to develop PTSD if they have less education (NC, 2012).

Document presented by Marshall (2005) mentioned that no clear cut evidence explains the relationship between PTSD and educational achievement. In spite of and theoretically, it might be suggested, those with low education are more vulnerable to trauma exposure and develop PTSD. This is accompanying with low personal sources that assist to cope and overcome of PTSD.

Through the process of data analysis in order to find out the association between PTSD among Shengalian IDPs with their occupation the present study shows that the occupational status is not related to show PTSD among Shengalian IDPs.

Kimberling et al., (2009) conducted study in a population based sample of 6698 California women, disagrees with present study which shows that unemployed women have higher probability to develop current PTSD.

Focusing on the association between Shengalian IDPs marital status with suffering from PTSD the present study indicates that marital status did not impact on presenting PTSD among those persons.

Similarly, a research conducted by Kwan and Tan (2008) in order to address the trend analysis of PTSD prevalence among different segments of armed services in the United States military through FY2001 and FY2006, that revealed marital status has no significant difference in probability of being PTSD.

Likewise, supportive study done by Azuo (2016) among 100 Ezidians women who survived from ISIS capture and the results of the study shows that no significant difference between the groups for PTSD level in regarding to their marital status.

Unlikely, study established in 2008 for examining the correlation between marital status and PTSD in United Kingdom service members who deployed in Iraq. Which is stated that those single service members developed PTSD symptoms more than others service members (Iversen et.,al, 2008).

In relation to the religion of the Shengalian IDPs interpretation of the results depicted that their religion has no power to develop PTSD.

Likewise, supportive evidence presented through study conducted by (Frans O, 2003) on 3000 subjects randomly selected from general population in Uppsala, Sweden reported that ethnicity had no significant impact on presenting PTSD.

The researcher justification was that the majority of residents in these camps were Ezidian who displaced from Shengal District.

Conclusions

In relation to the discussion and interpretations of the study results, the study concluded the followings:

1. The present study revealed that most of Shengalian IDPs who reside in the camps were between the adolescence and early adulthood of age, with equal distribution of gender and nearly half of them were illiterate, and married, and the majority of them were Ezidian.
2. In regard to the prevalence of PTSD the present study confirmed that (14.5%) of Shengalian IDPs those resident in the camps meet both methods of diagnosis and criteria for PTSD symptoms.
3. Through the process of data analysis and interpretation of the study results, the findings that emerged through the association of Shengalian IDPs demographic characteristics with the prevalence of PTSD, the females were more affected by PTSD than males.

Chapter Six: Conclusions and Recommendations

Recommendations

According to the previous conclusions, the present study recommends the followings:

1. Establishing psychosocial care centers inside or close to the camps for management of psychological problems especially PTSD individuals will facilitate the way for them to be visited and following up their conditions.
2. Establishing psychological educational awareness programs to the families for addressing and dealing with their PTSD family members.
3. Requalification courses or programs about psycho-therapeutic management for families those having family members with persisted PTSD.
4. Establishing special management programs for PTSD directed for females inside the camps.

References:

1. Abou-Saleh M, Mobayad M (2013). Mental Health in Syria International psychiatry, 10(3), 58-60.
2. Ali N I. (2015), The Anxiety and Depression Levels Among Internally Displaced in Kurdistan Region of Iraq, M.Sc. Thesis, Near East University, Cyprus, P.6
3. Alsaeed NY and Abdullah AH (2007). Assessment of Posttraumatic Stress Disorders in Kindergarten Children in Mosul City. College of Basic Education Researchers journals; 3(4):189-206.
Available from: <http://www.doria.fi/handle/10024/84>.
4. Azuo H S (2016), Post traumatic Stress Disorder among Ezidian Women who Escaped from ISIS Capture, MSc. Thesis, Near East University.
5. Backholm K (2012), Work-related Crisis Exposure, Psychological Trauma and PTSD in News Journalists, Doctoral dissertation, Abo Akademi University.
6. Baily H (2014), Posttraumatic Stress Disorder and Cultural Trauma: Anxiety Disorder and Cultural Coping Methods for Hurricane Katrina Survivors, Ph.D. Thesis. Colorado State University
7. Bonanno G A. (2004). Loss, trauma, and human resilience have we underestimated the human capacity to thrive after extremely aversive events, American psychologist, P.4
8. Botello J (2015), Combat-Related Posttraumatic Stress Disorder: Locus of Control and Marital Satisfaction, Ph.D. Thesis. Walden University, Minnesota.
9. Briere, J. (2004). Psychological Assessment of Adult Posttraumatic States: Phenomenology, Diagnosis, and Measurement. Washington, D.C.: American Psychological Association.
10. Ceri V, Özlü-Erkilic Z, Özer Ü, Yalcin M, Popow C, Akkaya-Kalayci T. (2016). Psychiatric symptoms and disorders among Yazidi children and adolescents immediately after forced migration following ISIS attacks, Neuropsychiatr [cited 2017 march 27]; 30:145–150
Available from: DOI 10.1007/s40211-016-0195-9
11. Durand, V.M., Barlow, D.H. (2006). Anxiety Disorders. Taflinger, M. (Ed.), Essentials of Abnormal Psychology (pp. 155-161). Belmont, CA: Thomas Wadsworth.
12. Dyb G (2005), Posttraumatic stress reactions in children and adolescents, Ph.D. Thesis. Norwegian University of Science and Technology, faculty of medicine.
13. EMEA (2008), guideline on the development of medicinal products for the treatment of post- traumatic stress disorder (PTSD), European Medicine Agency London: EWP-P.2.
14. Engelbrecht A R. (2013), Cultural Differences in Trauma Appraisals and Implications for the development and maintenance of post-traumatic stress disorder (PTSD), Ph.D. Thesis, University of East Anglia, Department of Psychological Sciences, UEA, Norwich, United Kingdom.
15. Frans Ö, (2003), Posttraumatic stress disorder (PTSD) in general population, Ph.D. Thesis, Uppsala University. Sweden.
16. Galgano A (2006). Post-traumatic Stress Disorder: Healing the Body and Mind, senior. Thesis, Liberty University.
17. Gubinelli F (2014), PTSD: etiology neurobiology and treatments, Thesis. Jagiellonian University.
Available from: www.researchgate.net/publication/270958073
18. GÜL E (2014), Prevalence Rates of Traumatic Events, Probable PTSD and Predictors of Posttraumatic Stress and Growth in a Community Sample From \zmgr, Ph.D. Thesis. Middle East Technical University
19. Herbert JD, Forman EM (2006), Posttraumatic Stress Disorder, in Fisher JE, O'Donohue W, editors. Practice Guidelines for Evidence Based Psychotherapy, Newyork: Springer; [cited 2017 Jan 30].
Available from: [Dol:10.1007/978-0-387-28370-8_56](https://doi.org/10.1007/978-0-387-28370-8_56)
20. Hogberg G (2008), Post Traumatic Stress Disorder: Neurobiology and Effects of Eye Movement Desensitization and Reprocessing, Doctoral Thesis, Karolinska Institutet, Stockholm, Sweden
21. Iversen AC, Fear NT, Ehlers A, Haker-Hughes J, Hull L, Earnshaw M, et.,al (2008). Risk factors for Post-Traumatic stress disorder among UK armed forces personnel. Psychological Medicine, [cited 2017 March 30]; 38 (4): 511-522.

Available from: 10.1017/S0033291708002778

22. Kessler RC, Sonnega A, Bromet E, Hughes M, Nelsen CB (1995).

Posttraumatic stress disorder in the national comorbidity survey, *JAMA Psychiatry* [cited 2017 Jan 6]; 52(12):1048-1060

Available from: [Dol:10.1001/archpsych.1995.03950240066012](https://doi.org/10.1001/archpsych.1995.03950240066012).

23. Kessler, R.C. (2000). Posttraumatic Stress Disorder: The Burden to the Individual and to Society. *Journal of Clinical Psychiatry*, 61[suppl 5], 4-12.

12.

24. Killeen J A (2011), Journalists and PTSD: Below The Fold, MS.C. Thesis. University of Missouri, Columbia

25. Kimberling R, Alvarez J, Pavao J, Mack K P, Smith M W, Baumrind N (2009). Unemployment among women: Examining the relationship of physical and psychological intimate partner violence and posttraumatic stress disorder. *Journal of Interpersonal Violence* [cited 2017 March 28]; 24(3): 450-463.

Available from: 10.1177/0886260508317191.

26. Kinchin D (2005). Post Traumatic Stress Disorder, the Invisible Injury; Suzanna Rose, Institute of Psychiatry; [Cited 2016 Nov 25].

Available from <https://bullyonline.org/old/successunlimited/books/ptsympt.htm>.

27. Kingston C (2012), Understanding posttraumatic stress symptoms in carers of people with psychosis a cross-sectional study, Ph.D. Thesis. Institute of Psychiatry, King's College London. Available from: <https://kclpurekcl.ac.uk/portal/>.

28. Kniss JR (2012), Propranolol: a Treatment for Posttraumatic Stress Disorder (Ptds) Or a Breach in Neuroethics?, Graduation with Honors. All Regis University Theses.

Available from: <http://epublications.regis.edu/Theses>.

29. Kroch R (2009), Living With Military-Related Posttraumatic Stress Disorder (PTSD) -A Hermeneutic Phenomenological Study, Ph.D. Thesis. Calgary, Alberta.

30. Kwan BW, Tan LY (2008), Economic Analysis of Post-Traumatic Stress Disorder (PTSD) in the Global War on Terrorism (GWOT), NPS, California.

California.

Available from: <http://hdl.handle.net/10945/3761>

31. Lazar J (2013), When the Body is a Dangerous Place: A Map of Trauma and the use Mindfulness in Clinical Practice, MS.C. Thesis. City University of Seattle Vancouver, Canada.

32. Leishman K (2013), A Critical Review of The Utility of Complex Posttraumatic Stress Disorder in Operation Enduring Freedom and Operation Iraq Freedom Veterans: a Protocol For Group Treatment, Ph.D. Thesis. Pepperdine University.

33. Marshall V W (2005), Economic Effects of PTSD: A Review, University of North Carolina at Chapel Hill.

34. Martskvishvili K. (2010), The Relationship between Emotional Inrelligance, Coping and Posttraumatic Stress Disorder, Ph.D. Thesis. At

the Faculty of Social and Political Sciences, P.2

35. Mayo Clinic (MC) (2013).post-traumatic stress disorder (PTSD), [cited 2017 Jan 24].

Available from: www.mayoclinic-org/diseases-conditions/posttraumatic-stress-disorder/basics/definition/con-20022540.

36. Meng Y (2010), Veterans' Experiences of Iraq War and Afghanistan War and Influences on Posttraumatic Stress Disorder Symptoms After

Deployment, Bachelor. Thesis. Turko University of Applied Science, p.9

37. Murburg MM, Me Fall ME, Lewis N, Veith RC, (1995), Plasma norepinephrine Kinetics in patients with posttraumatic stress disorder,*Biological Psychiatry*;38(12):819-825 Dol:10.1016/0006-3223(95) 00044-5

38. Myo Clinic (MC)(2012).Post-Traumatic Stress Disorder (PTSD),[cited 2016 Nov 20].

Available from:<http://www.mayoclinic.com/health/post-traumatic-stressdisorder/DS00246>

39. Myovela B (2012), The Prevalence of Posttraumatic Stress Disorder and Associated Mental Health Problems among Institutionalized Orphans in Dar Es Salam, Tanzania, M.Sc. Thesis. Muhimbili University of Health and Allied Sciences

40. National Institute of Mental Health (NIMH) (2013). Post-Traumatic Stress Disorder. [cited 2017 Jan 25].

Available from:<https://www.nimh-nih.gov/health/topics/post-traumaticstress-disorder-ptsd/index.shtml>.

41. NC (2010), Advancing science and Promoting Understanding of Traumatic stress, US Department of Veterans Affairs.

42. NC (2012), Advancing science and Promoting Understanding of Traumatic stress, US Department of Veterans Affairs, using the PTSD Checklist (PCL-C):pp.1-2

43. Newell T (2009), Neurocognition in Posttraumatic Stress Disorder, Ph.D.

Thesis. University of Southampton

44. Newman, Edward, and Selm, J. (2003) Refugees and forced displacement:

international security, human vulnerability, and the state. Tokyo Japan: The United Nations University.

45. Nutt, D.J. (2000). The Psychobiology of Posttraumatic Stress Disorder.

Journal of Clinical Psychiatry, 61[suppl 5], 24-29.

46. Özdemir,Boysan M, Özdemir PG, Yilmaz E (2015), Relations between Posttraumatic Stress Disorder, Dissociation and AttentionDeficit/Hyperactivity Disorder among Earthquake Survivors, *Arch Neuropsychiatr*; [cited 2017 march 30];52:252-257.

Available from: Dol:10.5152/npa.2015.7616

47. Ogburn Z (2015). Best Practices for Treatment of Post-Traumatic Stress Disorder, BC.S. Thesis. Portland State University.

48. Ozer EJ, Best SR, Lipsy TL, Weiss DS, 2003, predictors of posttraumatic stress disorder and symptoms in adults: a meta-analysis. [Cited 2017 Jan 18]; 129(1):52-73.
Available from: <https://www.ncbi.nlm.nih.gov/pubmed/12555794>.
49. Pynoos, R.S., Frederick, C., Nader, K., Arroyo, W., Steinberg, A., Eth, et al. (1987). Life Threat and Posttraumatic Stress in School-age Children. Archives of General Psychiatry, 44, 1057-1063.
50. Repo S (2014), Nursing Care of the Adult Woman Following Rape, as systematic literature review, Bachelor, Thesis. Turko University of Applied Science.
51. Riley JS (2012), Post Traumatic Stress Disorder. En Espanol (Spanish version), Health Library Home EBSCO, p.3
<http://healthlibrary.epnet.com/GetContent.aspx?token=ffe89542-7047-469b-aadd-ceed6d53cb65&chunkid=11604>
52. Rostami A (2012), Post-traumatic Stress Disorders among Children in Kirkuk in Northern Iraq, MS.C. Thesis. University of Oslo, p.34
53. Sabri R (2008). Prevalence of post-traumatic stress symptoms among internally displaced people after 22nd Feb.2006 in Erbil governorate. A fellowship Thesis, Iraqi Board for Medical Specialization.
54. Sana R, Khattak SUR (2014).Prevalence of post traumatic stress disorder in flood affected population of Banda Sheikh Ismail, district Nowshera. J Postgrad Med Ins [cited 2017 March 20]; 28(1):27-32.
55. Schiraldi, G.R. (2000). The Post-Traumatic Stress Disorder Sourcebook: A Guide to Healing, Recovery, and Growth. Los Angeles: Lowell House.
56. Søndergaard H P (2002), Posttraumatic Stress Disorder and Life Events among Recently Resettled Refugees, Ph.D. Thesis. Karolinska Institutet, Stockholm, Sweden
57. Stearns R. (2011), Post Traumatic Stress Disorder: Predisposed Careers, Therapy, and Positive Support, M.SC. Thesis, The Graduate School University of Wisconsin-Stout, Menomonie.
58. Tagurum yo. Chirdan oo, obindo T, Bello DA, Afolaranmi TO, Hassan ZI et.al, (2015). Prevalence of Prevalence of Violence and Symptoms of Post-Traumatic Stress Disorder among Victims of Ethno-Religious Conflict in Jos, Nigeria, University of Jos, Nigeria. J psychiatry [cited 2017 March 26]; 18 (1): 1-6
Available from: <http://dx.doi.org/10.4172/psychiatry.1000173>
59. Tekin A, Karadaa H, Süleymanoalu M, Tekin M, Kayran Y, Alpak G et.al. (2016). Prevalence and gender differences in symptomatology of posttraumatic stress disorder and depression among Iraqi Yazidis displaced into Turkey, European Journal of Psychotraumatology [cited 2017 march 20]; 7:1, 28556.
Available from: <http://dx.doi.org/10.3402/ejpt.v7.28556>
60. Thompson B L. (2008), Mindfulness as a Predictor of Posttraumatic Stress Disorder Symptomatology in an Experimental Avoidance Model, Ph.D.
Thesis. The University of Montana Missoula, MT, P.1
61. Tolin Df, Breslau N (2007). Sex differences in risk of PTSD. The National Center for PTSD. Volume 18:NO2.
Available from: <http://www.ptsd.va.gov>.
62. Toscano CL and Roberts KA (2014).Mental Health Services for Military Veterans with Post Traumatic Stress Disorder, MS.C. Thesis. California State University, San Bernardino, pp.8-9
63. Twist DM (2015). People With Post Traumatic Stress Disorder Heal With Story, Ph.D. Thesis. George Fox University.
64. Venos CAO (2015). Empowering People with Concurrent Disorder in a Clinical Context: a Structural Perspective, MS.C. Thesis. University of Northern British Columbia.
65. Villarreal EJ (2012), Post-Traumatic Stress Disorder (PTSD) Symptoms as Predictors of Suicide Behavior among Veterans with and Without a History of Traumatic Brain Injury (TBI), Ph.D. Thesis. Texas A&M University.
66. Wassmer J T (2010), The factor structure of Posttraumatic Stress Disorder -A confirmatory factor analysis and an exploration of the influence of trauma type on the symptom presentation MS.c. Thesis. Utrecht University, p.4
67. Welsh RN (2013), Post Traumatic Stress Disorder (PTSD) in The Latino Culture: a Proposed Culturally-Responsive Intervention Program For Latinas, CMC Senior Thesis. Claremont McKenna College
68. Woidneck MR (2012), Acceptance and Commitment Therapy for the Treatment of Posttraumatic Stress among Adolescents, Ph.D. Thesis.
Utah State University
69. Wolfe, J., Erickson, D.J., Sharkansky, E.J., King, D.W., & King, L.A. (1999). Course and predictors of posttraumatic stress disorder among Gulf War veterans: A prospective analysis. Journal of Consulting and Clinical Psychology, 67(4), 520-528.
70. Yehuda R (2002), Posttraumatic Stress Disorder:Current concepts. N Engl J Med: 346: 108-114
Available from: [Dol:10.1056/NEJMra012941](https://doi.org/10.1056/NEJMra012941).
71. Yeomans P D. (2007), The Effect of Posttraumatic Stress Disorder Psychoeducation on the Nature and Severity of Traumatic Stress Symptoms in a Burundian sample, Ph.D. Thesis. Drexel University, PP.2-4
72. Young, Allan (1995), the Harmony of Illusions: Inventing Post-traumatic Stress Disorder. Princeton: Princeton University Press.

Foot Note: This work is partly presented at Joint Event on 6th World Congress on Nursing and Healthcare, February 17-18, 2020 | Paris, France