

# **NAIROBI UNIVERSITY**

**FACULTY OF MEDICINE**

**DEPARTMENT OF PSYCHIATRY**

**LITERATURE REVIEW**

**ON**

**MANAGEMENT OF POST TRAUMATIC STRESS**

**DISORDER IN THE BRITISH ARMY**

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**REG NO:H44/83748/2016**

**LITERATURE REVIEW SUBMITTED IN PARTIAL FULFILLMENT FOR THE**

**AWARD OF PGD IN PSYCHOTRAUMA MANAGEMENT**

## **DECLARATION**

I declare that this project is my work and has not been presented anywhere for the award of diploma or degree.

Signature.....

Leah Jelagat

H44/83748/2016

## **APPROVAL**

This is to certify that the systematic literature review work has been carried out independently by Leah Jelagat. PGD psychotrauma management.

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## **ACKNOWLEDGEMENT**

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## **DEDICATION**

This project is dedicated to my family members who assisted me in one way or another to have it completed.

## **ABSTRACT**

Psychotrauma ensues after a traumatic incident, and the incident may involve an array of different occurrences such as witnessing grim physical injury, actual death of an individual(s), sexual abuse, rape, assault, a risk to the psychological or physical injury, or being held, hostage. Post-traumatic stress disorder (PTSD) is a stress and trauma related disorder and has gone through various forms of definitions such as; traumatic war neurosis, railway spine, stress syndrome, battle fatigue, shell shock, post-traumatic stress syndrome (PTSS), or combat fatigue. If not managed, post-traumatic stress disorder leads to the impairment in associations of the affected and strain society and families. Set out soldiers are at more high risk of experiencing PTSD though more less than often they receive inadequate treatment. Up to date most of the published literature talks so much about the management in the American Army compared to the rest of the world armies though the British have also done some publications. The goal of this literature review is to look into the management of PTSD in the British Army, look at the treatment models and the successful use of the models. The systematic review looks at PTSD in the army and especially the British army. From the review, I noted that PTSD cuts across all the world military, the models of management are borrowed across the board. In conclusion, PTSD management in the military still has a long way in order to achieve its full mitigation

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# 1. INTRODUCTION

Posttraumatic stress disorder (PTSD) is a condition that arises from subjection to a traumatic happening. In this part will look at the Historical background of PTSD which includes early diagnosis, signs and symptoms, the diagnostic criteria and management. It will also cover the problem statement, justification, and objectives.

## 1.1 HISTORICAL BACKGROUND FOR PTSD

PTSD has its roots in the military, and it can be linked back to the World War I, World War II and the Vietnam war. It was first not understood when soldiers started manifesting symptoms that were not recognized thus the signs been given names such as combat fatigue, shell shock among other titles.

PTSD as a disorder first appeared in 1980 in Diagnostic and statistical manual third edition (DSM III) which was availed by the American psychiatric association. In this analysis it was associated with Vietnam War effects, the conflicts that the soldiers had experienced in the war led to the formation of expressions such as “soldiers’ heart,” war neurosis and “shell shock’

When looking back further into the development of PTSD, it can be noted that the 1792 to 1800 French Revolution war and 1800 to 1815 Napoleonic war. It was claimed that soldiers experienced health defects such as collapsing into a form of stupor when a shell rolled past them, though physically they looked untouched, this was given a French description ‘vent du boules’ condition which subjects were scared by the passage of cannonball. (Grinken and Spiegel,1945).

In the search to understand the shell shock, more studies and literature was documented after first world war, second world war and Vietnam War. First world war was considered as the initial

modern war fought and it is during this time that a lot of scientific psychiatric research was done, thus the advancement of knowledge on psych traumatology in European psychiatry and influenced the work of the American medicine (U.S department of veterans).

In 1971 Robert Gaupp, a well-known German psychiatrist reported cases of battle hypnosis, he indicated that in 1914 after a significant artillery battle, the hospitals were filled with many soldiers who presented with mental disturbance. The primary cause was the explosion of enemy shells and mines, and thus the condition was later the diagnosis of shell shock. (Grinken et al, 1945)

According to Merskey (1995), the first mention of the determination was published in the times in the 6th February 1915 when they reported that soldiers suffering from shock have been taken for special treatment in hospital for persons with epilepsy and paralyzed section of the national hospital in Queen-square. In the second month of that same year, February, Charles Myers used shell shock in a piece published by Lancet describing suffering experienced by soldiers from memory loss, weak or lost vision, and lack of taste and smell.

In World War II, several soldiers who participated in the battle experienced symptoms that were not well understood despite the experience of first world war. The post-traumatic symptoms were reported in 1945 among the military personnel. It is still attributed to the work of Grinker and Spiegel(1945) the American psychiatrists. They coined the term, war neurosis which was selected by an understatement “operational fatigue’ a condition that was common among the air force. Other severe combat symptoms included; psychosomatic state, passive-dependent states, aggressive and hostile, depression and guilt and other psychotic indicators like states. (Keane, Marshall, Taft, 2006)

## 1.2 Nostalgia, Soldier's Heart, and Railway Spine

Austrian physician Josef Leopold (1761) composed about "nostalgic experiences in militaries and exposed to military trauma, and there were those who report missing home, sadness, and sleep difficulties during the civil war, PTSD like symptoms were models of psychological injury.

Another model described the physical symptoms as being caused by "irritable heart" which was characterized by increased pulse, anxiety, and labored breathing.

Dr. Jacob Mendez studied soldiers with 'soldiers heart and termed it as occurring due to overstimulation of the nervous system of the heart, and it was later labeled "Da Costa's Syndrome."

The term 'railway spine' came into use since at that time rail travel had become common in Europe and thus increase in railway accidents, the accident victims displayed symptoms of lack of sleep and anxiety due to trauma (U.S Department of veterans)

Jones and Wesley (2005) summarized the history of PTSD as follows;

Before 1914 it was termed as "Soldier's heart, unrestful heart, palpitation, Da Costa's syndrome, disordered heart action, nostalgia, and wind contusion

From (1914 to 18)" Shellshock, effort syndrome, neurocirculatory asthenia, war neurosis, hysteria due to gas, neurasthenia". This was the first world war

From (1939 to 45)" Effort syndrome, non-ulcer dyspepsia, psychoneurosis, battle tiredness". This is the period of second world war

From (1965 to 74) “Effects of Agent Orange”. These were effects of Vietnam war

In 1991, the” Desert Storm syndrome,” Gulf War syndrome, Gulf-related illness.” (John and Wesley, 2005)

### 1.3 Summary of PTSD referred names over time

PTSD has had an evolution of references and names over time, incompleteness of the list of names aligned to PTSD is attributed to the limitations of documentation as experienced in early 1900 century. Initial names were not particular or specified as the contemporary PTSD. However, most of the acquired names have made an inclusion of the history of the prevalence of the present PTSD.

These names were mainly used in the 1800’s; Soldiers Heart, Traumatic Neuroses, Hysteria, Irritable Heart, DaCosta’s Syndrome, Irritable Heart, Railway Spine & Fright Neuroses.

Then in 1900’s the disorder was described as; Concentration Camp Syndrome, Neurocirculatory Asthenia, Disorderly Action of the Heart, War Neurosis, Posttraumatic Stress Disorder (PTSD) , Shell Shock, Stress Response Syndrome, War Sailor Syndrome, War Hysteria, Vietnam Veterans Syndrome, Rape and Trauma Syndrome, Combat Stress Reaction, Abused Child Syndrome, Battered Woman Syndrome.

### 1.4 PTSD Epidemiology

The term Epidemiology refers to the study of the determining and distribution factors of disease in demography. A lot of research has been steered to pinpoint the occurrence of PTSD in diverse populations. National Center for PTSD (2015) evaluated the pervasiveness of PTSD in nationally representative samples and a combination of Veterans as samples.

Prevalence is the fraction of individuals who have a given disorder in a particular population in a specified period. The estimates of Prevalence can be affected by factors such as disorder occurrence (increase in prevalence is associated with improvement in the manifestation of a new disorder) and the number of days the disease has prevailed (prevalence increases with increase in duration of stay with the disorder). Gender and age are other factors that are used in the estimate.

### 1.5 PTSD prevalence in a Community

The National Comorbidity Survey Replication (NCS-R), showed results of a survey that was conducted from February 2001 to April 2003. The study estimated that the prevalence of PTSD on a lifetime basis was 6.8 % among adult Americans as compared to the prevalence of PTSD which was approximated at 3.5% the past year. Men had 3.6% of lifetime prevalence while women had 9.7%. A report on one year prevalence was at 1.8% in men and 5.2% in women (U.S department of health care policy, 2004).

The first study was conducted in the late 20th century with a composition of representative samples. Interview sample comprised of 8,098 Americans who were stipulated to the age of 15 to 54 years. The assessed PTSD prevalence was 7.8% in the generalized populace, 10.4% being women which was more than double that of men which showed 5% to be affected by PTSD initially (U.S department of health care policy, 1990)

Little or no epidemiological assessment has scrutinized PTSD prevalence amongst children. Non- the less, studies showing PTSD prevalence among children at high risk for example those who have encountered a particular traumatizing events such as natural disasters or abuse has been done. Conversely, it is considered that children who have experienced traumatic occurrences have a raised PTSD prevalence compared to the generalized adult population.

Kilpatrick (2003) evaluated the frequency of PTSD amid adolescents, relied on the information from the National Survey carried out on teenagers, which had an inclusion of 4,023 sampled adolescents of ages between 12 - 17. DSM-IV principles for PTSD was used, the result showed an estimate of 3.7% prevalence for boys and 6.3% for girls.

### 1.6 PTSD in other countries

World Health Organization (WHO), (2008) published the report on epidemiological statistics on mental health disorders globally that was collected since 1990. The data was composed from around 200,000 participants in 27 countries. Survey gave approximation of the prevalence of PTSD for lifetime as ranging from 0.3% in China and 6.1% New Zealand.

### 1.7 PTSD prognosis

PTSD when early detected and well managed the individual can go back to the regular routine and some fully recover. However, there are poor prognostic factors in PTSD, this poor prognosis is predicted by factors such as long duration and early appearance of symptoms. The elderly and Children have a lesser prognosis. Other factors may include; war-related traumas, type of injury, and traumas related to sexual and physical assault are being associated with subordinate prognosis than wounds that are related to the occurrence of natural havocs and traffic accidents. (National Center for PTSD, 1997). Lack of social support, family instability, conflicts at home or work do impact negatively on the prognosis and cause of PTSD. Other influences that can lead to the deprived prediction of PTSD include childhood trauma, a high number of PTSD symptoms, female gender, history of anxiety and mood disorders, alcohol abuse, co-occurring medical conditions, and more prominent numbing and hyperarousal symptoms. (Keane, Marshall , Taft 2006).

## 1.8 THE DEVELOPMENT OF PTSD DIAGNOSIS

The first publication of the Diagnostic and Statistical Manual of Mental Disorders (DSM I) was in 1952 by American Psychiatric Association (APA) . It had an analysis of gross stress reaction used for reference of those who were comparatively ordinary but had specific symptoms from an initial combat or traumatic experience. This diagnosis came with the assumption that the reactions to trauma would resolve soon, and if they persisted for over six months, it was given another diagnosis.

In 1968, adjustment reaction was added in DSM II a diagnosis considered inadequate in determining conditions that were similar to PTSD. Certain limitations were experienced in this diagnosis; fear related to combat duties, the Ganser syndrome (patent from improper response to questions) unwanted pregnancy with suicidal thoughts, and in detainees facing a death sentence.

1980 saw PTSD being included in DSM III by APA, it was initiated as a result of study that involved, Holocaust survivors, veterans of Vietnam War, victims of sexual trauma, among others. The relationship between after-military citizen life and war trauma and were recognized.

In 1987 DSM-III-R was published, its criteria for diagnosing PTSD was also revised and subsequently in 1994 DSM IV was published, the year 2000 is when DSM IV-TR was published and DSM 5 in 2013. This was done to echo the continued study that had been ongoing concerning PTSD. In all this research, it is significant to note that in DSM 5 PTSD was not classified as an anxiety syndrome though sometimes it is associated with the change in mood such as depression. DSM 5 categorizes PTSD as stress-related disorders and trauma. (APA, 2013). It also stipulates the diagnostic criteria that unless a person meets the diagnosis cannot be arrived at.

## 1.9 PTSD AND NEUROBIOLOGY

Neurobiological study designates that PTSD can be connected to neurobiological changes in the autonomic and central nervous systems. The Psychophysiological modifications linked to PTSD are extreme stimulation of the sympathetic nervous system. Neuroendocrine and Neuropharmacological abnormalities were noted in brain mechanisms that developed adaptation, and species coping survival.

Structural brain imaging showed reduced hippocampal volume as well as the anterior cingulate, while dynamic imaging showed increased activity of the amygdala and diminished action in the hippocampus and prefrontal cortex. (Friedman, Charney & Deutch, 1995)

## 1.10 RISK FACTORS FOR PTSD

For PTSD to develop, several factors predispose or make an individual at risk of or susceptible to PTSD. (The National Center for PTSD, 2000). The factors include the following;

### 1.10.1 Environmental risk factors

When looking at environmental risk factors, the social environment will also be considered or factored in here. Subjection to traumatic incidences is one of the causes of PTSD, history of a person before exposure to trauma is essential more so long-lasting stress which is an extreme potential threat factor for PTSD, (Davidson, 1991). King (1996) asserts that a person with a positive history of family discord and disruptions increases PTSD prevalence while social support reduces PTSD symptoms.



### 1.10.2 History of psychiatric illness and personality

A positive history of psychological and behavioral disturbance is associated with PTSD. Almost all forms of mental illness poses a risk of cerebral disorders which can be a sign of inadequate coping mechanism but a threat to PTSD ( Mc Farlane,1989).

Schnurr et al. (1993) opined that some personality scopes such as antisocial, neurotic personalities or avoidant before traumatic events poses a PTSD risk.

Peritraumatic dissociations are also considered as a risk factor. A study on trauma victims showed that those who had peritraumatic dissociations showed symptoms of PTSD after six months. The dissociative symptoms can be taken as a maladaptive strategy for coping concerning chronic stress childhood trauma (Spiegel, 1991). Hence dissociation can modulate relationship between the previous injury and higher susceptibility to PTSD.

### 1.10.3 Biological factors

According to Yehuda(1999a), biological abnormalities pose a risk to PTSD, though the defects can also be seen in people lacking PTSD they are probably linked to the pathophysiology of PTSD. He asserts that Neurohormonal factors such as low amounts of cortisol which is produced by the hypothalamic pituitary adrenal (HPA) axis is associated with PTSD. The alteration of HPA activity in a person with PTSD showed that these changes enhanced negative feedback occurring at this shaft and thus increased glucocorticoid receptors activity in order cortisol low.

Resnic (1995) indicated that the study of cortisol levels in rape cases after several hours were observed to be low in women with previous exposure to rape and were at risk of developing PTSD. Exploration of biological alterations was further done on adult children of the Holocaust

survivors. Yehuda et al (2000) noted that increased percentage of offspring's at risk had reduced levels of cortisol in comparison to children with no psychiatric condition whose parents were not exposed to trauma.

#### 1.10.4 Cognitive factors

Individuals with low intelligence have been found to have high risks of developing PTSD (Macklin,1998). Macklin did an assessment of soldiers before entering combat situation and found out that low intelligence before combat was linked to high risk of developing PTSD after combat exposure. A study on combat veterans with PTSD showed some marked impairment on explicit memory compared to those without PTSD. The Same research was done in rape victims with PTSD and those without and yielded the same results. (Jenkin, Langlais & Delis, 1998) therefore the possibility that the lower IQ predates trauma should be considered.

It was noted that individuals with PTSD indicated large neurological soft signs which are an indication of nervous system dysfunction. A preexisting neurodevelopmental impairment act as a risk to PTSD. (Gurvits, Gilbert, Lasko & Macklin,2000)

#### 1.10.5 Genetic factors

True, Rise, Eisten, Health & Nick (1993) studied the occurrence of PTSD in monozygotic and dizygotic twin and realized that 30 percent of PTSD symptoms seem to have a basis form genetics. Davidson (1995) also indicated that PTSD survivors were more likely to have close relatives and parents suffering from mood, substance abuse, and anxiety as compared to those lacking any development of trauma.

Other risk influences include; the presence of a child, drug and alcohol abuse, female gender, family instability among others.

## **1.11 SIGNS AND SYMPTOMS OF PTSD**

PTSD presents several signs and symptoms which have been categorized into four major groups; avoidance, intrusive memories, hyperarousal and mood changes.

### **1.11.1 Intrusion**

These are PTSD symptoms where a person experiences the following intrusive memories; Upsetting dreams or nightmares about the traumatic incident, reoccurrence of the incidence as if it is happening again (flashbacks), recurrent, and severe distress emotionally or reactions physically to things that act as reminders to the traumatic event. Intrusions majorly involves images, thoughts, or perceptions)

### **1.11.2 Avoidance**

The avoidance indications include: avoiding talking about or thinking concerning the traumatic event and evading activities, or specific individuals that prompt you to remember the traumatic event.

### **1.11.3 Negative alteration in cognition and mood**

These Signs include; Undesirable judgments about oneself, others and the world, Memory problems, like inability to remember significant pieces of the traumatic event, feeling disconnected from substantial others, difficulty in keeping relationships, being uninterested in activities you once enjoyed, anhedonia, and emotional numbness

#### 1.11.4 Hyperarousal

These are symptoms that are characterized by changes in physical and psychological reactions, they include: easily startled and being frightened, being on guard for danger, sleeping problems, Self-destructive conduct like excessive drinking and dangerous driving, impaired concentration, anger outbursts or aggressiveness, irritability, and shame or guilt.

Young individuals who are six years and below, other symptoms and signs of PTSD include re-enacting the occurrence of the traumatic event or some of its aspects during play and dreams that are frightening which may reflect the traumatic event.

The intensity of PTSD symptoms vary over time, and this is always determined by an individual's psychological state as well as triggers that remind you of the traumatic experience.

#### 1.12 DSM 5 DIAGNOSTIC CRITERIA

APA (2013) laid down the following criteria to diagnose PTSD

##### Criteria A

In this approach a person has to have an initial exposure to: real or endangered severe injury, threatened death, or real or susceptible sexual viciousness, as follows:

1. Straight subjection to traumatic incident
2. Seeing in person the traumatic events during its occurrence to someone else
3. Getting to know that a traumatic occurrence happened to a member of the family or a close associate. If the experience constituted threatened or real death, it must have been violent or accidental.

4. Experienced extreme or repeated subjection to aversive details of the incident(s), usually in the act of professional duties (e.g., collecting parts of a person's body, professionals frequently subjected to more information of children abuse).

Criterion A 4 doesn't relate to contact via television, electronic media, pictures or movies unless it is work related.

### Criterion B

Criteria B focuses on intuitive symptoms, and it needs presence of one or all of:

1. Intrusive, Recurrent, and involuntary upsetting memories: Children of ages above six experience repetitive play which may occur as traumatic events.
2. Frequent traumatic dreams whose content is connected to the traumatic event.
3. Children may experience scary dreams with things linked to the trauma(s).
4. Dissociative reactions such as flashbacks where the person acts as if the distressing experience was happening, they may occur in varied forms and may elicit extreme expressions and may even lead to one losing consciousness.

Note: In Children they may recreate the trauma-specific incident in their play.

5. Prolonged or intense distress at when exposed to internal and external traumatic prompts that represent or resemble aspects of trauma
6. Noticeable physiological reaction when exposed to trauma-related external or internal stimuli.

### Criterion C

Insistent effortful evasion of troubling cues related to trauma after the occasion: (at least one needed)

1. Avoidance of feelings related to trauma or thoughts, especially distressing memories.
2. Avoiding of or effort to avoiding external cues. (e.g., places, people, discussion, objects, situations or activities).

### Criterion D

Negative changes in mood and cognitions related with the shocking occasion, start or deteriorating after the occurrence of the traumatic incident, two or more of such are needed.

1. Failure to remember important aspects related to the traumatic incident (typically dissociative amnesia; which is not associated with alcohol, head injury, or drugs).
2. Exaggerated and persistent expectations and bad beliefs about the world or oneself (e.g., thoughts of being bad, or the dangers of the world)
3. Frequent, distorted ideas about the effects or cause of the traumatic incident. Often leading to self-blame or blaming others.
4. Constant undesirable trauma-related feelings (e.g., guilt, anger, horror)
5. Reduced interest in activities that are important.
6. feeling estranged or detached from others.

7. Continuous inability to have positive feelings. (anhedonia)

**Criterion E:**

It is about modifications in reactivity and arousal which is related to trauma, two or more of the following are required:

1. Irritable or angry outburst with or without provocations either verbally expressed or through aggressive conduct.
2. Recklessness or harmful behaviors
3. Hyper vigilance
4. Responding in an exaggerated startle
5. Concentration difficulties
6. Disturbance during sleep (insomnia or restless sleep)

**Criterion F: duration**

Consistency of symptoms (in the Criteria as mentioned above B, C, D, and E) which occurs in a period exceeding a month.

**Criterion G**

Notable impairment of function or symptom-related distress (such as occupational, social).

## Criterion H

This criterion specifies that the trouble should not be credited to any physiological influences of illnesses or substance use.

### Specify if

With dissociative symptoms.

If the person meets the criteria for diagnosis and has high levels of some of the following reactions;

1. Depersonalization: detachment or experience of unreality, being an outside observer in respect to one's sensation, feelings, body or actions sensations, thoughts (e. g., distorted sense, perceptual changes, unreal or absent self)
2. Derealization: facing an experience of unreality or impartiality concerning surrounding, (e. g., objects and individuals are experienced as dreamlike foggy, unreal, distorted or lifeless).

### Specify if

With delayed expression. In instances where full diagnosis of an individual is not achieved until six months after the incident (sometimes the initiation of appearance of signs may be immediate)

## 1.13 TYPES OF PTSD

According to Centre for PTSD, (2015) there are five types of PTSD namely; acute stress disorder, complex PTSD, typical stress response, comorbid PTSD and uncomplicated PTSD.



### 1.13.1 Normal Stress Response

The typical stress response happens when people who are not sick are exposed to one particular traumatic event. Adults have emotional numbing, vivid negative memories, derealization (being cut off from relationships, feelings of unreality, or bodily tension and distress). They may achieve full recovery after a period of a few weeks. Usually, debriefing in groups has shown to be helpful. Debriefs are started by describing the traumatic event, followed by an examination of survivors' emotional reactions to the incident, then discussion of symptoms brought by the trauma. Finally, psychoeducation where survivors' responses are elaborated and positive coping mechanisms are discussed.

### 1.13.2 Acute Stress disorder

When an individual does not recover after a stress response, then they are likely to develop acute stress disorder where a person exhibits panic reactions, confusion, dissociation insomnia, suspiciousness, poor self-care, sick relational behavior. It is only a few survivors of one trauma exposure that experience severe reaction unless the trauma is a long-lasting disaster that can lead to destruction death or displacement.

Management for ASD includes immediate support, being out of trauma scene, psychotherapy, social support, and pharmacotherapy if grief and anxiety do not resolve. Crisis intervention is Usually the best model of management.

### 1.13.3 Uncomplicated PTSD

Uncomplicated PTSD displays tenacious reoccurrence of trauma related incident, emotional numbing, and avoiding trauma related stimuli, hyperarousal. For management cognitive-behavioral, pharmacological, or combination approaches are encouraged.

#### 1.13.4 Comorbid PTSD

PTSD comorbid co-occurs in conjunction with other psychiatric conditions, and it is more prevalent than uncomplicated PTSD. PTSD is typically associated with either of the major psychiatric illnesses such as alcohol, depression, and panic disorder, substance abuse, and anxiety disorders. A good prognosis is achieved when PTSD is treated together with the psychiatric illness.

#### 1.13.5 Complex PTSD

This type of PTSD is diagnosed in persons who have initially been associated with lengthy exposure to traumatic situations, especially through early life, like being sexually abused as a child. Such people can also be diagnosed with either of these disorders; borderline, dissociative disorders, antisocial personality disorder, They portray interactive challenges such as aggression, impulsivity, alcohol or drug abuse eating disorders, self-destructive behaviors, and mood difficulties (such as depression, panic, intense rage) and mental challenges (dissociation ,fragmented thoughts, and amnesia). Management of complex PTSD takes longer and needs a structured form of therapy.

#### 1.14 PTSD SCREENING

According to U.S Department for Veterans (2013), there are several tools for the screening of PTSD. PTSD screening uses a short questionnaire that can identify people who are suffering from PTSD. Though some may have an optimistic response to the screening tool, it does not necessarily show that the person has PTSD. One can further be subjected to more professional analysis, and before a PTSD diagnosis is made, they should meet the diagnostic criteria currently the DSM 5. The screening tools include;

- Beck Anxiety Inventory-primary care (BAI-PC)
- Primary Care PTSD Screen for DSM 5(PC-PTSD-5)
- Short Screening Scale for PTSD
- Trauma Screening Questionnaire

## 1.15 PTSD MANAGEMENT AND TREATMENT

There are several methods to manage PTSD, and the approaches can be used as a single approach or in combination

### 1.15.1 Psychotherapy

People with group psychotherapy or post-traumatic stress disorder cognitive-behavioral therapy or both. There are various forms of treatment and they include;

### 1.15.2 Exposure therapies

Exposure therapy has been implemented in the military for many years where those affected discuss the traumatic incident again and again until the symptoms related to the event is are no longer distressing. An example of this form of therapy that is evidenced based Trauma-Focused Cognitive Behavioral Therapy, where narrative to trauma exposure is given. (Wood, Murphy JA, Center, 2008)

The vulnerability can be in the form of flooding (can be done at ones) or desensitization (gradually to build up the tolerance). Exposure can be done as a narrative that is verbally or in art forms like images.

### 1.15.3 Reprocessing

Eye Movement Desensitization and Reprocessing (EMDR) is an involvement where a person reprocesses events and memories. Reprocessing is defined as when an individual access the associated reminiscence and uses two-sided inspiration and imageries, contemplations, sentiments and body feelings to navigate the traumatic involvements that are unresolved. EMDR allows an individual to recall issues in a precise manner and putting it away that non- traumatic memorized are arranged. EMDR is suggested for people suffering from complex trauma though it can also be used in a single incident of injury. (Shapiro F, Fogelman-Sine S, Sine LF, 2008)

### 1.15.4 Medications

Medications are mostly used together with psychotherapy for PTSD, and it is noted that medications may suppress some signs associated with PTSD. These medicines include; antidepressants and antipsychotics.

### 1.16 Problem statement

PTSD has been known to occur to people who experience or who are exposed to threatened or actual death, grim physical injury, sexual violence, or combat. These events are usually out of range for ordinary human experience (Black & Anderson, 2014).

Kenya's involvement in the fight against terrorism in Somalia especially the periods from 2011 up to date has seen soldiers experienced a varied level of symptoms.

The psychological impact of terrorism in Kenya has also been felt by the general population.

### 1.17 JUSTIFICATIONS

- There are known preferences of PTSD in the war
- Get to know the existing models of PTSD management
- Due to the collaboration between the British and Kenya army which dates to the colonial times
- Develop models of control to be used in the Kenyan army

### 1.18 OBJECTIVES

- Review literature on management of PTSD in the British army
- Get to know the models of governance
- Review papers on success of therapy

### 1.19 METHODOLOGY

Search- The search engines used were; google chrome, google scholar, psycND and psyNET

Questions asked;

- Background of PTSD
- PTSD in the British Army
- Models of PTSD management in the British Army.

Inclusion and exclusion criteria

All literature with information on PTSD management in the British Army was considered while those with no control were excluded.

## 2 LITERATURE REVIEW

### PTSD management in the British Army

According to military.com, the Department of Defense (DOD) is facing various challenging factors in mitigating the most efficient way to deal with PTSD and its treatment. There is variance in the survey reports of the prevalence estimates of PTSD symptoms from Afghanistan and Iraq, but the survey has not brought out the exact problem of significance that is being investigated especially those that are related to combat. This factor makes it critical to understand the nature of employing specific treatments to sure people for particular conditions.

#### 2.1 Prevention

As it is the case of many disorders in the world, lucky prevention is better than cure, and so it's the case of PTSD. Gould, Greenberg & Hetherlon (2007) asserted that prevention of PTSD is paramount since it leads it may lead to the avoidance of traumatic experiences, and prevention of PTSD. Immediate exposure to traumatic incidences PTSD can be controlled through preventive interventions available, including, psychoeducation, brief counseling, decompression, and prophylactic medication.

Deahl, Srinivasan, Jones & Thomas (2000) pointed out that for the prevention of PTSD in soldiers who have been exposed to combat it is necessary to have a briefing before deployment so that they can know what awaits them, an aspect that Vitzhum, Mache & Joachim(2009) alludes to. Post-deployment debriefs and psychoeducation.

Vitzhum, et al. (2009) through their study in the Veterans argued that when preventive interventions are done PTSD can be mitigated and talked of pre-deployment debrief and social support as the primary prevention, secondary prevention is the little psychological interventions

and tertiary interventions as the after exposure intervention. Pietrzak, Johnson & Golstein (2000) brought up the issue of social support of the soldier's post-deployment as a preventive measure against the development of PTSD.

### **2.1. 0 primary prevention**

Literature indicated decompression and psychoeducation as forms of primary prevention.

Decompression in the British army was used to ensure that personnel spends less time in theatre or a third location, there is a place where they unwind, and the unwinding was referred to as decompression site (Fertout et al. 2011). The aim of decompression was/is to help soldiers to begin the process of transition back home (Hughes et al., 2008).

A decompression site should be far from the operation area. Jones et al. (2010) indicated that decompression had not been systematically evaluated, therefore it is not evidence-based. It lasts thirty-six hours in British military base.

Post-deployment education is another form of primary prevention. Adler et al. (2008) indicated that psychoeducation helps in preventing adverse effects of deployment. Though this is widely used Mulligan et al. (2010) asserts that few educational briefs have not been evaluated in randomized control trials. The UK has developed peer-delivered model assessment which has elements of psychoeducation. (Greenberg et al., 2010). UK has also adopted the Battlemind which is being used by the US, and it is an equivalent UK standard post-deployment stress and homecoming brief. (Mulligan et al., 2010)

### **2.1.2 Secondary and tertiary prevention**

In secondary prevention, Fertmout (2011) postulates that this stage is about mental screening. A Post Deployment Health Assessment (PDHP) is administered to quantify depression, interpersonal aggressiveness, traumatic stress, interpersonal conflict, and suicidal ideation.

For tertiary prevention, Iversen et al. (2003) indicated that UK soldiers who have mental disorders avoid seeking health assistance, they fail to recognize their own need for treatment.

This is as a result of self-reluctance due to stigma or lack of trust on mental health care workers

Brusher EA. (2007) opined that soldiers who received crisis intervention after exposure were less likely to develop PTSD since their immediate needs and concerns have been attended to.

## **2.2 Cognitive behavioral therapy**

Cognitive behavioral therapy has remained successful in handling PTSD, and there are several approaches to CBT being used in the British army.

Prolonged Exposure Therapy which is of two types'; imaginal exposure that involves extended and repeated recollection of the traumatic incidences and In vivo exposure which is a Methodical confrontation of trauma-related conditions that are avoided and feared, regardless of being safe.

The objective of therapy is to have increased processing of emotions related to traumatic incident to have situations or memories do not result in nervous stimulation to trauma or evasion conducts (Deahl et al., 2000).

Cognitive therapy whose aim is to modify the relationships between feelings and thoughts identify and challenge last and inaccurate automatic contrary ideas and develop other, helpful,



and more logical. Its primary objective is to aid the person know and regulate to trauma-related beliefs and thoughts and aid the person adjust his/her evaluations of the world and self. (Hoge, Soldiers, 2004)

Cognitive processing therapy puts together features of prolonged exposure therapy and Cognitive Therapy including challenging and identifying problematic beliefs and thought. Specific scrutiny is focused to "Stuck Points" such as opinions, feelings, and views that are initiated from the distressing happenings or are challenging to write, admit, and read aloud a comprehensive interpretation of the traumatic incident helps the person recognize and adjust from the trauma-related beliefs and thoughts. (Freedberg Sydney, 2008).

Cognitive processing therapy helps the person adapt his/her considerations of the world and self. Stress Inoculation therapy offers a diversity of surviving skills which are beneficial in handling anxiety, inhalation retraining, and including muscle easing, with the inclusion of other cognitive techniques such as guided self-talk. It aims to lessen stress and avoidance responses related to the traumatic thoughts, feelings, and memories. (Foa, Meadows, 1997)

Cognitive behavioral therapy for insomnia commonly known as CBT-I involves teaching on an in-depth evaluation of sleep complaints and empirically sustained cures for common sleep illnesses as observed in members of the service. CBT-I psychoeducation on images rehearsal therapy for hallucinations, and cure for breathing sleep disorders( Lu M, Wagner, Van Male Whitehead Boehnlein, 2009) and is sometimes used in combination with Pharmacotherapy for nightmares and insomnia. CBT-I increase knowledge on matters involving the overall sleep problems that are experienced by service members. Coherently, interventions and clinical

strategies are employed to help the service members to mitigate the problem. It also supports individual sleep intercessions.

### 2.3 Virtual exposure therapy

Virtual therapy is one of the most contemporary developments that has been developed to treat PTSD. This discovered method is utilized as a factor in preventing PTSD and also for therapeutic measures. As per the therapeutic process involved, soldiers are led to scenarios that are set in their deployment areas through computer-animated acts. These animations imitate lifelike situations that soldiers may face in the deployment area and enable them to revive their memories or sequence their responses. (Roth Baum, Hodges, Ready, Grasp, Alarcon, 2001)

### 2.4 Eye Movement Desensitization and Reprocessing (EMDR)

Shapiro F, Maxfield L (2007) talked about Eye EMDR as an additional form PTSD therapy. EMDR utilizes a mixture of talk therapy with precise eye movements. EMDR has been proved to be an essential aspect of the treatment of PTSD. In overall, it talk therapy component of EMDR can assist in changing the responses to the memories of the service members who had initially experienced trauma(s)

### 3 DISCUSSION AND CONCLUSION

Looking at the treatment models that have been used in the management of the British army there was no difference in those being used in the general population and other troops. However, it is important to note that all communities, as well as individuals who are exposed to different types of traumas, in different locations and they, have various coping mechanisms.

In my view, some of the approaches to the management of PTSD are more or less similar or somewhat serves the same purpose. For some therapies such as EMDR cannot be used successfully without the talk that comes with the cognitive behavioral therapies. The CBT seemed to have a more positive outcome when used in combination with the reprocessing therapies.

The preventive approach towards PTSD seems to yield more results, the soldiers who received pre-deployment brief had more resilience than those who did not, and this showed that even social support before deployment and during deployment reduces the risk of PTSD. The decompression period helped in reintegration back to the family but does not act as therapy in instances where a soldier develops PTSD.

The British army borrows a lot from the US army, for example, the adoption of the battlemind, which has brief educational series and sometimes the soldiers can do peer psychoeducation

In regards to post-deployment care, the post-deployment debriefing was mentioned as one of the ways of prevention or for mitigating PTSD, however, it's has been challenging in respect to its effectiveness, their question that arises is whether it helps or the increase the risk.

In conclusion, the world over is talking about PTSD, but there are no active campaigns to educate the public about the disorder to minimize the stigma around it. Borrowing from a memorandum written to the House of Commons by Robin, Martin, and David, it was clear that there is a feeling that the British government has not done a lot in the management of soldiers who develop PTSD.

The memoranda further told the House of Commons that social support was an essential aspect towards the recovery of veterans, thus rooting for community based mental health service. They cited resettlement as another, significant elements, especially for veterans, leaving the service, and emphasis was put regarding the British government putting more efforts in the care of veterans considering that the number of deployments and needs have increased unlike before.

The US after experiences in the past the new veterans discharging from the facility are now being treated by the US Department of defense. The UK defense has not made any arrangements for the retiring soldiers (Stagg & Elliott, 2005). However, the king's college is currently screening recruits for any mental disorders and proper deployment.

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