

# Assessment of Combat Induced Posttraumatic Stress Disorder (PTSD) Among Officers of the Nigerian Army Involved in the Fight against Boko-Haram Insurgency in North-Eastern Nigeria

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## ABSTRACT

**Aim:** The aim of the study is to assess symptoms of combat induced posttraumatic stress disorder (PTSD) among officers of the Nigerian army involved in the fight against Boko-Haram insurgency. Method:

**Participants:** 160 military officers that participated in the fight against Boko-Haram Insurgency were used as participants.

**Instrument:** A self-report measure-Post-Traumatic Stress Disorder Checklist for Diagnostic and Statistical Manual of Mental Disorders-fifth edition (PCL-5) was used as assessment tool in the study. PCL-5 is a 20-item measure that assesses the presence and severity of PTSD symptoms. PCL-5 items correspond with DSM-5 criteria for PTSD.

**Findings:** the study found that 56 (35%) of the participants reported reliving war-related traumatic episodes, 67 (48%) indicated moderate to severe feelings of recurrent, distressing battlefield memories, persistent dreams with themes related to combat experiences. Another 56 (35%) reported feeling as if the war was reoccurring, creating discomfort when anything reminded them of it; 37 (23%) reported substantial body symptoms such as a racing heart, difficulty breathing, and sweating. A total of 112 (70%) of the participants said they somewhat avoid any incidence that reminds them of war field experiences, while 38 (23%) said they fully avoid any circumstance involving combat activities. On the other hand, 10% stated they had no troubles with the battlegrounds. Another 75 (46%) of the study participants said they had trouble remembering key parts of their traumatic experiences, and 28 (17.5%) said they had significant doubts about themselves, other people, or the military in general. More specifically, 34 (21%) participants reported significant negative emotions such as fear, rage, guilt, or humiliation; and 49 (30%) participants reported losing interest in things they used to enjoy, feeling isolated or cut-off from others; 30 (18%) reported difficulties with positive emotions, such as being unable to feel happy or have feelings of love for people close to them. In addition, 43 (27%) of participants reported violent outbursts resulting in aggressive behaviours in reaction to provocations disproportionate to the aggression or hostility they displayed. Another 64 (40%) individuals agreed that they had trouble concentrating, paying attention, and finishing things once they started. The remaining 53 (33%) claimed having problems going asleep, staying asleep, or sleeping with occasional awakening. Discussions: discussions were made along these findings while relating them to what has been found in previous literature.

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## I. INTRODUCTION

Posttraumatic stress disorder (PTSD) is an anxiety disorder arising as a delayed and protracted response after experiencing or witnessing a traumatic event involving actual or threatened death or serious injury to self or others. Posttraumatic stress disorder is characterised by intense fear, helplessness, or horror lasting more than four weeks and being persistently re-experienced in form of distressing recollection of the traumatic event, recurrent dreams with themes reflecting the experienced trauma (Phelps, Forbes, Hopwood, & Creamer, 2011), sensations of reliving the experience, hallucinations, or flashbacks, intense distress and psychological reactions in response to anything reminiscent of the traumatic event (Lazarov et al., 2020; Regier, Kuhl, & Kupfer, 2013; Sullivan & Elbogen, 2014). Evidence of persistent avoidance of stimuli associated with the trauma, a numbing of responsiveness, and heightened arousal manifested as insomnia, irritability, difficulty concentrating, hypervigilance, or exaggerated startled response, formally called traumatic neurosis, are some of the positive symptoms of PTSD. Other symptoms include increased fight-or-flight response, disturbing thoughts, sensations, or nightmares connected with the events (Regier et al., 2013). Posttraumatic stress disorder can strike anyone who has witnessed or experienced a potentially dangerous event. Reasons some people get PTSD while others do not is unknown;

but the disorder arises after exposure to stressful experiences like sexual assault or war. These symptoms last for almost a month among adult populations. Young children, on the other hand, are less likely to show distress and instead express it via play (Feldman & Vengrober, 2011). Most people exposed to stressful events do not get PTSD. However, interpersonal violence, such as rape, sexual assaults, kidnapping, physical abuse by an intimate partner, and incest or other kinds of childhood sexual abuse, increases the risk of developing PTSD. Survivors of prolonged trauma or severe domestic violence may develop a complex type of PTSD.

Combat PTSD is a kind of post-traumatic stress disorder that affects soldiers during or after combat operations. Anyone exposed to live fire or who works as a support worker in a combat zone is at risk of developing PTSD. Not everyone who serves in the military suffers from PTSD, but a significant number do. According to the DSM-5, an individual must have direct knowledge of a traumatic incident, witness one, or hear that a loved one has been a victim of a traumatic event. Anyone who works in a combat zone is exposed to these dangers. Re-experiencing the traumatic incident is the second component. This frequently occurs as a result of flashbacks, but it can also occur as a result of visions, dreams, or hallucinations. Thirdly, a person suffering from post-traumatic stress disorder (PTSD) must avoid stimuli linked with the experience. This may mean avoiding thoughts or ideas of war, as well as war-related locations. Finally, those who suffer from PTSD have negative thoughts and feelings regarding the occurrence.

People with PTSD frequently display these qualities, and their loved ones frequently characterize the soldiers as having "turned into someone else" upon return from combat operations. Some soldiers may be crippled, killed, or wounded while others may see injury or death. These and other variables may contribute to their increased risk of developing PTSD or other mental health problems. Mental health problems are more prevalent among soldiers exposed to high levels of battle stress. Studies revealed that Iraqi military are more prone to mental health problems than Afghan personnel. Numerous studies have established a relationship between battle field stress and PTSD in which between 10% and 18% of personnel displayed symptoms of PTSD (Armenta et al., 2018; Khaylis, Polusny, Erbes, Gewirtz, & Rath, 2011). Although research methods differ, estimates of depression among returning veterans range from 3% to 25% (Ramchand, Rudavsky, Grant, Tanielian, & Jaycox, 2015; Ramchand et al., 2010). Excessive drinking and smoking is a problem for veterans of the Operation Enduring Freedom (OEF) and Operation Iraqi Freedom (OIF). Among returning OEF/OIF veterans, PTSD symptoms frequently manifest months later. Six months following their return, the military men were assessed using a conventional PTSD test. The results showed that the veterans were more likely to have a positive test later in life, indicating increased PTSD symptoms (Dursa, Reinhard, Barth, & Schneiderman, 2014). After six months, those who tested positive (exhibited increased PTSD symptoms). According to the study, some variables such as first experience of combat operation increases the incidence of PTSD among OEF/OIF military personnel (Dursa et al., 2014)

## **II. LITERATURE REVIEW**

For decades, posttraumatic stress disorder (PTSD) has been extensively researched in military personnel and veterans (Beckham et al., 1996; Brewin, Andrews, & Valentine, 2000; Hoge et al., 2004; Hoge et al., 2002; Hoge, Terhakopian, Castro, Messer, & Engel, 2007). PTSD can develop as a result of experiencing or witnessing traumatic events such as a battle, natural disaster, or a severe personal assault (Regier et al., 2013). Combat's influence on PTSD among military is a major source of worry for the general public, military officials, and indeed, it can be a disabling consequence of severe or life-threatening illness (Booth-Kewley, Larson, Highfill-McRoy, Garland, & Gaskin, 2010; Ozer, Best, Lipsey, & Weiss, 2003) which can impair personal and social functioning, resulting in social disengagement, hostility, and aggressiveness (Begić & Jokić-Begić, 2001; Carroll, Rueger, Foy, & Donahoe, 1985; Trickey, Siddaway, Meiser-Stedman, Serpell, & Field, 2012). Moreover, posttraumatic stress disorder has a widespread effect on military personnel's preparedness and morale as well as the attainment of military objectives (Hoge et al., 2007; Riviere, Kendall-Robbins, McGurk, Castro, & Hoge, 2011). Although Military personnel are extensively trained before going to war, the experiences of war-front greatly affect their physical and psychological health during and after returning from the battle fields. The tragedies of war to which soldiers are exposed, panic that they are awaiting death; the experience of having to kill, seeing dying people, the smell of decomposing dead bodies including those of their colleagues, civilians and enemy soldiers with no opportunity to grieve; holding human dead bodies and body parts, seeing shattered homes and communities and displaced refugees are undeniably very devastating in the minds of soldiers who participate in combat operations (Dean, 1997; Inoue, Shawler, Jordan, & Jackson, 2021). Soldiers in the war front experience problems such as overcrowded living conditions; higher operation related demands, deprivation of sleep and harsh climatic conditions (Plumb, Peachey, & Zelman, 2014). There are also psychosocial problems like separation from loved ones and missing significant family members (Hewitson, 2016).

These experiences and conditions affects the soldiers by overstretching their available coping resources thereby predisposing them of developing psychological problems (Mohr, 2017). In recent years, suicide and suicidal ideations have become issues of increasing concern for veterans, service members, and their families. According to a 2014 report by the Department of Defence, there were 1,080 suicide attempts and 245 suicides among active-duty service members for all armed services in calendar year 2013. A recent study of 52,780 active-duty members of the U.S. Air Force found that 3 per cent of male participants and 5.2 per cent of female participants reported suicidal ideation in the previous year. Of the participants that reported suicidal ideation, 10 per cent also reported a recent suicide attempt (Anestis, Daruwala, & Carey, 2019). Veterans who screened positive for PTSD were 4 times more likely to report suicidal ideation than veterans who did not, and the likelihood of suicidal ideation was greater in veterans who screened positive for PTSD and two or more comorbid disorders (Anestis et al., 2019). While post-traumatic stress disorder among soldiers has been well publicized; other mental distresses can also result from the trauma of war. Study in the journal of general psychiatry found that one in ten Iraq war veterans develop serious mental problems, including violent behaviour, depression and alcohol abuse. The study found that PTSD or depression seriously impaired daily functioning in 10 per cent to 14 per cent of the participants (Salamon, 2010).

According to the International Organisation for Migration (IOM), the most common psychological problems experienced by both military and their families include fears for their safety, feeling anxious or overwhelmed by deployment-related challenges and responsibilities, worry about children, and vulnerability to additional stressors that might arise (SteelFisher, Zaslavsky, & Blendon, 2008). Similarly, the world health organisation (WHO), estimated that in the situations of armed conflicts throughout the world, 10% of the people who experience traumatic events will have serious mental health problems and another 10% will develop behaviour that will hinder their ability to function effectively. The most common conditions are depression, anxiety and psychosomatic problems such as insomnia, or back and stomach aches and Post-traumatic stress disorder (World Health Organization, 2001) Incapacitating on its own, PTSD is also linked to the development of physical illnesses for veterans as years pass. Researchers from an army medical centre reported that 54 per cent of veterans with PTSD also had sleep apnea, compared with 20 per cent of PTSD patients in the general population (Plumb et al., 2014). PTSD among serving and returning soldiers is also associated with a greater risk of developing dementia (Nolan, 1995; Salamon, 2010).

**Risk factors for PTSD among the general population;** Numerous studies have been presented to explain the genesis of PTSD, including biological and psychological theories such as psychodynamic theory, learning and cognitive theories. Cognitive theory, however, better explains how PTSD develops (Lonergan, 2014; Shubina, 2015). The biological theory of PTSD tries to better explain the condition, understand the risk factor and associated brain pathways underlying the illness. Neurobiological research indicates that PTSD is caused by unique pathways from chronic stress and other mental illnesses. For instance, (Bremner et al., 1995; Bremner, Southwick, Johnson, Yehuda, & Charney, 1993; Nemeroff et al., 2006) reported hypothalamic-pituitary-adrenal axis (HPA axis) dysfunction in individuals with PTSD. Additionally, (Gelpin, Bonne, Peri, Brandes, & Shalev, 1996) observed that individuals with PTSD had abnormal volumes of catecholamines, as they exhibit hyper vigilant symptoms such as sleeplessness and feeling drowsy and easily terrified. Moreover, alterations in immune system may contribute to the onset, progression and maintenance of PTSD among susceptible individuals (Wong, Lee, & Lim, 2005). According to the risk factor literature, not everyone who witnesses a stressful incident will get PTSD. As a result, it has become widely recognised that, in addition to the traumatic event itself, individual vulnerability factors contribute to the development of PTSD (Bremner et al., 1993).

**Risk factors for PTSD among the military :** In the past several decades, researchers have concentrated on combat-related PTSD and identified individual and societal risk factors which include being younger at the time of the incident, being a woman, being a member of a minority race, and having a lower socioeconomic level as well as social support deficit (Bremner et al., 1995; Bremner et al., 1993; Davidson, Hughes, Blazer, & George, 1991; Nemeroff et al., 2006). While all studies routinely obtained demographic data of participants, there is less agreement on the risk factors evaluated or the evaluation techniques used to analyse these variables (Brewin et al., 2000), and the methods for measuring the severity of trauma have been largely inconsistent over time. There is an increasing body of research on veterans, with emphasis on more specific difficulties that cannot be compared across studies due to a lack of established measurements (Xue et al., 2015). Some studies reported correlation between certain risk factor and PTSD. Kaylor et al. conducted a meta-analysis on the subject, focusing on the overall psychological impact of service in the military in Vietnam (Kaylor, King, & King, 1987; Weaver & Clum, 1995). Furthermore, Rubonis and Bickman (1991) analysed the positive correlations using meta-analysis, to find the link between traumatic experience and psychopathology, pre-trauma vulnerability (e.g., family history of mental illness, gender, etc.), personality characteristics, early trauma, bad parenting

Experiences, and low educational attainment were all linked to PTSD. The proportions of the stressor, preparedness for the traumatic event, initial reactions to the trauma, and post-trauma variables (e.g., developing symptoms, social support, and other life stress) were all found to be associated with PTSD. According to the meta-analysis by Brewin et al. (2000), the predictors of PTSD include pre-trauma risk factors, but trauma severity and post-trauma risk factors have somewhat larger predictive effects. These include lack of social support, life stress, the severity of a traumatic event, or childhood abuse and other adversity in childhood were significant predictors of PTSD. In another study, Ozer et al. (2003) focused on a comparison of fixed predictors, drawing on Brewin et al.'s work (e.g., psychological adjustment before the key traumatic event, hereditary history of psychopathology, death during the traumatic event) to likelihoods that distresses are more likely to occur to have a role in the psychological and neurological processes resulting from the exposure to post-traumatic stress disorder. Ozer et al., concluded that the strongest predictor was peri-traumatic dissociation of PTSD, followed by a perceived threat to one's life and a reported lack of support. In another meta-analysis, Trickey et al. (2012) investigated the population estimates of 25 presumed risk factors for PTSD. They submitted that subjective peri-trauma and post-event characteristics had a significant impact in the development of PTSD in children and adolescents. However, their research, focused primarily on studies examining the risk factors for PTSD in civilian populations rather than the military or the armed forces.

While previous studies reported that, soldiers who witnessed the death or wounding civilians or alliance members substantially report mental health problems including suicidal ideation, symptoms of depression and posttraumatic stress disorder (Back et al., 2019), these findings were reported in studies conducted in developed countries where soldiers receive psychological preparation for combat readiness before deployment to war fronts. In Nigeria however, due to the near absence of mental health professionals and mental health services in the nation's military formations, soldiers are often deployed to the battle fields without any form of psychological preparation thus increasing their chances of developing combat induced mental health problems. Given the prevalence of psychological problems associated with war and its effects on the military personnel deployed to fight such wars, the aim of this study is to assess the symptoms of PTSD among officers of the Nigerian army involved in the fight against Boko-Haram Insurgency in the North Eastern Nigeria.

### **III. METHOD:**

**Participants:** A total of one hundred and sixty participants were enlisted for this study. Their age ranges from 23 – 52 years. Their educational status ranges from (senior secondary school, national diploma and Nigeria certificate of education, higher national diploma as well as bachelor's degree. All the participants enlisted for the study are military personnel who served in the fight against Boko-Haram Insurgency in North Eastern Nigeria. They include officers of the Nigerian Army, Navy and the Nigerian Air force. The participants selected for this study have served in the fight against Boko-Haram Insurgency for at least a period not less than one year and have been fully involved in real war with the insurgents.

**Instrument:** A standardised instrument, Post-Traumatic Stress Disorder Checklist for Diagnostic and Statistical Manual of Mental Disorders-fifth edition (PCL-5) was used as assessment tool in the study. PCL-5 is a 20-item self-report measure that assesses the presence and severity of PTSD symptoms. Items on the PCL-5 correspond with DSM-5 criteria for PTSD. The instrument has a variety of purposes, including: quantifying and monitoring symptoms over time, screening individuals for PTSD and assisting in making a provisional diagnosis of PTSD.

**Administration:** The PCL-5 is a self-report measure that can be read by respondents themselves or read to them either in person or over the telephone. It can be completed in approximately 15-20 minutes. The preferred administration is for the respondent to self-administer the PCL-5. Participants can complete the measure either in the waiting area prior to a session with a psychologist, at the beginning of a session with a psychologist, at the close of a session, or at home prior to an appointment. The instrument-PCL-5 is intended to assess symptoms in the past months following exposure to stressful life experience. A major weakness of the PCL-5 is that it should not be used as a stand-alone diagnostic tool. When considering a diagnosis, the clinician will still need to use clinical interviewing skills, and a recommended structured interview (e.g., Clinician-Administered PTSD Scale for DSM-5, CAPS-5) to determine a diagnosis (Weathers et al., 2013).

**Scoring:** A total symptom severity score (range - 0-80) can be obtained by summing the scores for each of the 20 items. DSM-5 symptom cluster severity scores can be obtained by summing the scores for the items within a given cluster, i.e., cluster B (items 1-5), cluster C (items 6-7), cluster D (items 8-14), and cluster E (items 15-20). A provisional PTSD diagnosis can be made by treating each item rated as 2 = "Moderately" or higher as a symptom endorsed, then following the DSM-5 diagnostic rule which requires at least: 1 B item (questions 1-5),



1 C item (questions 6-7), 2 D items (questions 8-14), 2 E items (questions 15-20). Initial research suggests that a PCL-5 cut-off score of 31-33 is indicative of probable PTSD across samples.

**Interpretation:** Characteristics of a respondent's setting should be considered when using PCL-5 severity scores to make a provisional diagnosis. The goal of assessment also should be considered. A lower cut-point score should be considered when screening or when it is desirable to maximize detection of possible cases. A higher cut-point score should be considered when attempting to make a provisional diagnosis or to minimize false positive

**Psychometric properties of PCL-5:** The PCL-5 is a psychometrically sound measure of DSM-5 PTSD. The Posttraumatic Stress Disorder Checklist (PCL) is a widely used DSM-correspondent self-report measure of PTSD symptoms. The PCL was recently revised to reflect DSM-5 changes to the PTSD criteria. Psychometric properties of the PCL-5 were examined in 2 studies involving trauma-exposed college students (N = 278). PCL-5 scores exhibited strong internal consistency ( $\alpha = .94$ ), test-retest reliability ( $r = .82$ ), and convergent ( $r_s = .74$  to  $.85$ ) and discriminant ( $r_s = .31$  to  $.60$ ). It is valid and reliable, useful in quantifying PTSD symptom severity, and sensitive to change over time in military Service members and undergraduate students.

**Data collection Procedure:** Data collection for this study was done on face to face bases. Soldiers who participated in the fight against Boko-Haram Insurgency in the North-eastern Nigeria consented to participate in the study and all enlisted soldiers responded to the instrument. Ethical clearance was sought from the military authorities before the conducting the study.

**Findings:** The data collected for the study was analysed on the bases of the subscales of PCL 5.)According to Weathers et al. (2013), scoring and Interpretation of PCL 5 Scores consist of a total symptom severity score (from 0 to 80) and scores for four subscales-Re-experiencing, Avoidance, Negative alterations in cognition and mood and Hyper-arousal. These are four domains consistent with the four criterion of PTSD in DSM-5. The findings of this study are therefore presented in accordance with the domains and criterions of DSM-5.

**Criterion B:** criterion B items (1-5) measure symptoms related to re-experiencing the traumatic events that causes the PTSD. Of the 160 participants of this study 56 (35%), of the participants reported a little bit re-experiencing combat related traumatic events; 67 (48%) of the participants reported experiencing moderate to extreme feelings of repeated, disturbing, and unwanted memories of the traumatic experience of the battle field and reported having persistent dreams of their stressful combat experiences. On the other hand, another 56 (35%), participants reported extreme feelings and react as if the stressful experience were actually happening again and therefore feeling very upset when something reminded them of the stressful experience. While the remaining 37 (23%) of the participants reported experiencing strong physical reactions in the form of rapid heart beating, difficulty breathing and sweating when reminded of the stressful combat experiences

**Criterion C:** criterion C measures avoidance. Among the participants of this study, a total of 112 (70%) of the participants endorsed that they 'moderately or quite a bit' avoid any situations that reminds them of the battle field experiences; 38 participants reported that they extremely avoid any situation that has to do with combat operations. Conversely, 10 (6%) participants endorsed that they experience no feelings of avoidance of the battle field.

**Criterion D:** measured changes in cognition and mood. Out of the participants of the study; 75 (46%) reported extreme failure to recollect significant features of the traumatic event; 28 (17.5%) endorsed having strong negative beliefs about themselves, other people, or the military service altogether. Moreover, 34 (21%) participants reported having strong negative feelings such as fear, anger, guilt, or shame; another 49 (30%) of the experiences loss of interest in activities they used to enjoy, as well as feeling distant or cut-off from other people. The remaining 30, (18%) of the participants endorsed that they experience moderate to extreme trouble in terms of positive feelings such as being unable to feel happiness or have loving feelings for people close to them.

**Criterion E:** Criterion E measures hyper-arousal. Symptoms of hyper-arousal include changes in arousal and reactivity which include being impatient and violent outbursts; acting recklessly or self-destructively; being suspicious of one's surroundings; being easily startled; or having difficulty focusing attention or difficulty falling asleep. Out of the 160 participants, a total of 43 (27%) participants experienced violent outbursts resulting in fights and other types of aggressive behaviours with slight provocations disproportionate to the degree of violence or aggression displayed. Another 64 (40%) participants endorsed items indicating they have difficulty concentrating, focussing attention and inability to complete tasks when started. The remaining 53 (33%)

participants reported or endorse items suggesting they have difficulty initiating and maintaining sleep or sleeping with intermittent waking.

#### **IV. DISCUSSIONS:**

The findings of this study were discussed along the DSM-5 criterion for classifying and diagnosing posttraumatic stress disorder. Thus, the discussions were based on the symptom profiles explained for positive symptoms of PTSD on DSM-5 used for differential diagnosis of the disorder for the purpose of research and clinical interventions. These were discussed along with the already existing literature on the subject under study.

**Criterion B:** In this study, it has been found that among soldiers who participate in the fight against Boko-Haram Insurgency in North-eastern Nigeria, moderate to severe emotions, feelings of repeated, unpleasant, and undesired flashbacks of the traumatic events on the battle field were recorded. This finding is consistent with (Lazarov et al., 2020). A significant number of the participants also reported experiencing persistent nightmares and dreams about the stressful war experiences; a finding that correlates with (Phelps et al., 2011) who used structured interviews and self-report assessments, to examine the phenomenology of PTSD nightmares in 40 veterans. According to their findings, dream content differed across replay, non-replay, and mixed dreams, but effect remained relatively consistent across all dream types. Thus, participants of this study who manifested typical intrusion symptoms are likely to experience significant psychological discomfort, such as anxiety or panic as well as physiological responses such as autonomic arousal. Intrusion symptoms may manifest spontaneously or may be prompted by situations that mimic or mirror the traumatic incident events that predispose their manifestations.

**Criterion c:** It has been found in this study that a significant number of the soldiers who participated in the fight against Boko-Haram Insurgency in North-eastern Nigeria presented with symptoms of avoidance. The symptoms suggest efforts by the sufferers to withdraw from particular situations that bring about bodily distress of trauma-related symptoms. This finding is in line with (Booth-Kewley et al., 2010; Regier et al., 2013). These might also be interpreted as signs and symptoms behaviours that people display to reduce other sorts of stressful experiences such as consuming alcohol or other drugs to self-medicate nervous sensations. Acts of avoidance arise in attempts to avoid painful recollections, thoughts, or feelings concerning or closely related with the traumatic event(s). External reminders such as people, places, conversations, activities, items, circumstances that generate shocking memories, thoughts, or feelings about, or that are strongly related with the traumatic events. These external reminders might include noises; odours; physical symbols or objects associated to the traumatic event.

**Criterion D:** Of the 160 participants, the findings reveal that, close to half (46%) reported having difficulty remembering major aspects of the traumatic events they experienced. This failure to recollect important details of the traumatizing experiences may be as a result of fear of the negative emotional feelings accompanying such memories. It can therefore be argued that the participants tried to avoid such negative feelings resulting from the memories. More so, a significant number of the participants (30%) reported experiencing feelings of no interest in activities they previously enjoyed. This shows that, these participants would have difficulty to concentrate, needing to redo a job, working more slowly than normal, feeling exhausted at work, and accomplishing nothing during the workday because they were sick. This finding is consistent with (Ford, 1999; Stander, Thomsen, & Highfill-McRoy, 2014) both of whom reported that following the trauma of war, soldiers presented with symptoms of depression and other related or comorbid emotional conditions.

**Criterion E:** The study's findings indicate that more than 40% of participants have difficulty with cognitive processes such as concentrating, focusing attention, and completing tasks once begun; 33% reported having sleep disorders as a direct consequence of their combat experiences; and others reported being suspicious, restless, hostile, self-destructive, and frequently searching their environment, as well as being easily agitated. Consistent with the findings of (Nolan, 1995), who discovered that soldiers with continual, combat-related PTSD experienced reoccurring awakenings associated with startle, sadness, physical alertness, and nightmare recall and increased mobility throughout sleep, whilst still experiencing adverse thoughts and feelings that resulted in constant and erroneous beliefs about themselves or others.

#### **V. SUMMARY AND CONCLUSION:**

The present study investigated combat induced posttraumatic stress disorder among officers of the Nigerian army involved in the fight against Boko-Haram insurgency in the North-Eastern Nigeria. A total of 160 men of the Nigerian military service participated in the study. Assessment of PTSD was made using PCL-5, a standardised measure used in assessing symptoms of PTSD. The findings indicated that most of the military

officers who participated in the fight against Boko-Haram Insurgency presented with positive symptoms of PTSD. Discussion of the study's findings was made along the four DSM-5 criteria -B, C, D, & E. The DSM-5 criteria provides a succinct criterion for the diagnosis and experiential presentation of post-traumatic stress disorder (PTSD), which is regarded as a distinct syndrome in people who have been through a serious traumatic incident. The DSM-5 criteria regarded the disorder as consisting of four categories of symptoms including re-experiencing the incident in dreams, thoughts, or flashbacks; emotional numbness and avoidance of stimuli evoking the trauma; and a constant state of elevated alertness. Given that, the first symptoms of PTSD are typically delayed, and there is a transition period between them and the trauma, it is important that officers returning from all combat operations be screened for PTSD to determine the extent of the disorder among them so that appropriate therapeutic intervention measures be put in place to resolve the difficulties in the lives of such officers to live in peace and harmony with their families, friends and co-workers.

**Recommendations:** Given the high incidence rate of PTSD among Nigerian personnel involved in combat operations, it is recommended that the Nigerian military service should come up with a policy for assessment of risk factors for developing PTSD among the military so that factors such as the rank, branch of service, cumulative length and number of deployments should be carried out such that officers with higher risk profiles should not be deployed to reduce the incidence of developing PTSD. Also, individuals with genetic predisposition to developing anxiety disorders, prior history of anxiety disorder and depression should not be enlisted for combat operations as these increase the chances of developing PTSD. Still based on the outcomes of this study, it is also recommended that, prior to deployment of officers for combat operations like the fight against Boko-Haram insurgency, pre-combat operation inoculation measures, exposing the officers to likely traumatic events to be encountered during operations be conducted to reduce the incidences of combat related PTSD. Evidence based therapeutic approaches for the treatment of PTSD should be utilised to treat returning soldiers to reduce the sufferings in their lives. Research into to develop interventions specifically for the treatment of combat induced PTSD should be initiated with the aim of treating returning soldiers with combat induced PTSD and other psychopathologies.

**Limitations of the study:** This study is not without limitations. First, there is a need to conduct further research consisting of more participants as the number of participants used in this study is too small to make generalisation on the entire officers that participated in the fight against Boko-Haram Insurgency in North-Eastern Nigeria. Though the instrument used in this study is a standardised one, there is a need to design a qualitative study to find out other personal experiences of the participants that were not captured by the instrument used in collecting data for this study. Standardised instruments limit respondents to express feelings and experiences present in the instrument. There are numerous personal experiences and feelings that are specific to individuals that if known, would shade more lights to the severity of the disorder and would form bases for further research. Again, in the present study, no analysis according to gender was made. Since there are male and female officers involved in the operation, getting to know how PTSD affects male and female officers of the Nigerian army involved in combat operations would be of greater advantage in terms of policy, research and practice.

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