Prevalence and Experience of Combat-related Postraumatic Stress Disorder (PTSD) among Combatants in Armed Force Comprehensive Specialized Hospital

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A thesis submitted to the College of Education and Behavioral Studies School of psychology of Addis Ababa University in partial fulfillment of the Degree of Master of Art Degree in Counseling Psychology.

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Statement of approval

As thesis research advisor, I hereby certify that I have read and evaluated this thesis prepared, under my guidance, by Mulualem Argaw entitled "**Prevalence and Experience of Combat-related Post-traumatic Stress Disorder (PTSD) among Combatants in Armed Force Comprehensive Specialized Hospital**". I here by recommend it to be submitted as fulfilling the thesis requirements.

Dr. Tigist Wuhib _____ _____

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Table of Contents

List of Tables

Pages

List of Acronyms

APA American psychological association

APA American psychiatric association

AFCSH Armed Force Comprehensive Specialized Hospital

AEA Assignment Eligibility and Availability

CEES Combat exposure experiences scale

COVID19 Corona virus disease 19

ECOMOG Ecowas Monitoring Group

DSM Diagnostic and Statistical Manual

OEF Operation Enduring Freedom

OIF Operation Iraqi Freedom

PCL Post Traumatic Stress Disorder Checklist

PC-PTSD Primary Care Post Traumatic Stress Disorder Screen

PTSD Post Traumatic Stress Disorder

NVVRS National Vietnam Veterans Readjustment Study

LRA Lord's ResistanceArmy

PCL-CPTSD Checklist for civilians

SADF South Africa Defence Force

NACM Negative alterations incognition and mood

UN United Nation

WHO World health organization

DCLARATION

I, the undersigned, declare that the thesis entitled "**Prevalence and Experience of Combat-related Post-traumatic Stress Disorder (PTSD) among Combatants in Armed Force Comprehensive Specialized Hospital**" is my original work with guidance and support of the advisor, Dr. **Tigist Wuhib.** And it had not been submitted to any other college, institution or university for any degree or diploma.

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Abstract

This study wascarried out to determine the prevalence and experience of combat related Post-Traumatic Stress Disorder among the population of armed force comprehensive specialized hospital. Descriptive quantitative survey was carried out using questionnaire of PCL-5(DSM-5, post-traumatic stress disorder checklist) and CES (combat exposure scale) to screen PTSD. Atotal of 85 respondents were studied comprising 78(91.8%) males and 7 (8.2%) females, from surgical and psychiatry department of Armedforce comprehensive specialized hospital, which had experienced with combat related exposure. The overall prevalence of combat related Post Traumtic Stress Disorder among respondents was 57.6%, and the overall combat exposure experience among respondents was 38.8%. The results indicated that at $p > 0.05$, chi-square value= 2.851, difference (Df) =1 and Pearson coefficient (P-value) =0.091, there was no statistical significant relationship between and PTSD and combat exposure with respect to respondents in the combat related PTSD. At $p < 0.05$, chi-square value= 11.198, difference (Df) =1 and Pearson coefficient (P-value) =0.001, there was a statistical significant relationship between combat exposure experience and PTSD prevalence among respondents.The prevalence and experience of combat related PTSD was high in this study. The researcher suggested, as it needs further assessment, referral to further treatment and resource for those combat related PTSD victims.

Key words: Prevalence, Experience, PTSD, Military Combatants

Chapter One: Introduction

1.1 Backgrounds of the study

As researchers report, Post-traumatic stress disorder (PTSD) stands out as a major mental illness, and is becoming aserious public health challenge (Kilpatrick, Resnick, Milanak, Miller, Keyes, & Friedman, 2013). According to Kilpatricket al., (2013) report, currently more than two percent of the US populations (about 7.7 million people) were known to suffer from PTSD. As authors report, in the military context, it is estimated that 11% to 20% of US military personnel who served in Iraq or Afghanistan have diagnosed or undiagnosed PTSD (US Department of Veterans Affairs, 2016).

Posttraumatic stress disorder (PTSD) among military personnel and veterans has been studied for more than 30 years(Galanter,& Kleber, 1994). As to these authors, PTSD may develop after an individual experiences or witnesses a traumatic event, such as combat, a natural disaster, or a violent personal assault. PTSD is often been studied among military personnel in relation to combat trauma (Beckham, Lytle, Vrana, Hertzberg, Feldman & Shipley, 1996 ; Brewin,& Valentine, 2000; Dohrenwend, Turner, Turse, Adams, Koenen, & Marshall, 2007; Hoge, Castro, Messer, McGurk, Cotting, & Koffman, 2004).They reported the effect of combat on PTSD in military personnel is a major concern among the public, military leaders, and policy makers.(Booth-Kewley,Larson, Highfill-McRoy, Garland, & Gaskin, 2010). Indeed, it can be adebilitating consequence of severe or life-threatening trauma (Breslau, 2002).,PTSD is the result of experiencing a traumatic event during the war such as combat, or according to Gradus,report a non-war traumatic event such as a terrorist attack, family violence, sexual assault, orseriousinjury.(Gradus,2016).

As researchers report, death and loss are an inevitable consequence of armed combat and sometimes also occur as a consequence of high intensity, real-worldtraining. Not surprisingly, most soldiers report at least some loss experienceduring their time in service. What is surprising, however, ishow little research this area has received. Only a few studies areavailable on veterans' experiences of grief and bereavement and thesestudies suggest problematic levels of grief. A study oftreatment-seekingveterans reported grief symptoms as high as bereaved people who hadrecently lost a spouse (Pivar & Field, 2004).As author reported as enduringor unresolved grief has been identified as a unique syndrome separatefrom depression, anxiety, and PTSD (Watson, Brymer & Bonanno, 2011).

Researchers stated that PTSD is a widespread problem among soldiers who experienced highly stressful combat theaters. (Smith, RyanWingard, Slymen, Sallis, & Kritz-Silverstein, 2008).This pervading mental health concern may be accounted by an association between combat exposure's intensity and PTSD severity.(Troyanskaya, et al., 2015). According to researchers' report, example, 40 or more years after the Vietnam War, around 271,000 Vietnam combat veterans have current full PTSD plus subthreshold combat-related PTSD.

According to researchers reports, Interestingly, a preliminary study discussed how the dominant PTSDconcept communicates conflicting messages to soldiersthat possibly make soldiers suffer (e.g., war-related suffering) internallybecause it fails to grasp soldiers' significant elements of personal illness experience that includes the culture of the military context.(Molendijk, Kramer & Verweij, 2016).

Moreover, as author report the institutional PTSD narrativescommunicated by the armed forces mental health servicesimbued with dominant PTSD-concept, conflict as author report ,with and shape soldiers' personal PTSD. The author shows, for instance, soldiers learn

simultaneously that violence maintains soldier toughness but is abnormal. As researchers report, Soldiers also simultaneously learn that PTSD is normal but is an ineffective response.

Ethiopian military forces have been ready in trying to join at the UN peace keeping missions, continental level through the African Union medium and then regionally through the Ecowas Monitoring Group (ECOMOG) as we have seen over the years. As researchers report, internally, our military forces have been involved in trying to work for internal peace. As author report, the Ethiopian military has from the working duty of African peacekeepining; it is obvious that PTSD has been an existential problem among military combatant since its first discovery after the First World War. However, this is becoming a more serious challenge as emerging studies have shown a steady increase its prevalence with corresponding consequences (Dai, Yu, Wu, Wu, & Fu, 2010).

In Nigeria for instance, recent empirical findings have revealed that three out of ten combat military combatant is vulnerable to PTSD (Ameh, Kazeem, Abdulkarim, & Olasupoo,2014). In order to contain the Boko-Haram menace, many of the Nigerian military personnel were deployed to the war front been out stretched in peace keeping missions(hisabu ,2013).

According to hisabu, (2013) report they have being on operation fields from the troubled North Eastern andwestern part of Ethiopia border keeping responsibilities and so, these issues. And as researcher report, many more have led to the deployment of our military to various combat groundsjust in a way to curbing these for bearing menace.Military combatants have missions to keep the country and the constitution from internal and external enemies to the country, Thus each military combatantsshould have strong and healthy status to fulfill his or her duty, problems like PTSD could result in refusal of deployment, increment

in attrition, loss of experienced military personnel and So on. This will have an impact on combat readiness and extend to combatants and their family.

1.2 Statement of the problem

The purpose of this research is to address the problem concerning the lack of studies with Armed force military populations, the lack of prospective studies and the methodological shortcomings that currently exist in the literature, and to expand our knowledge about the predictors of PTSD prevalence and experience inthe Army.

In addition, indiscussing the findings, this research report also seeks to establish certain relationships or draw comparisons with the data produced by the first, study part of the research program. It there fore addresses the overall objective of the research project, which is to gain a bette runderstanding of the development of PTSD in military clients and of the factors involved.

PTSD has been an existing problem among military combatants since its first discovery after the First World War. However, this is becoming a more serious challenge as emerging studies have shown a steady increase in its prevalence with corresponding consequences (Dai, Yu, Wu, Wu, & Fu, 2010). In Nigeria for instance, recent empirical findings have revealed that three out of ten combat military combatant is vulnerable to PTSD (Ameh, Kazeem, Abdulkarim, & Olasupoo,2014). In order to contain the Boko-Haram menace, many of the Nigerian military personnel were deployed to the war front.

In the course of this exposure, many military personnel and other security agencies were exposed to combat stress, in the theater of war, such as being wounded due to improvised as authors, report explosive device(IED), enemy action, friendly firing, self-inflicted injury, and deliberate self-harm and trauma cases caused by non-enemy actions. Some army personnel, whether physically injured or not, have resorted to use of substances to

escape or suppress the trauma (FGD, 2018),as cited in(Abel J, et al., 2018).And sadly, this form of coping with trauma has been shown to increase vulnerability to PTSD in foreign studies.

As authors report, the Ethiopian military that is at the front of these battles are the liberators, and they need to be taken care. As researchers shown, in most instances, because the military have been over stretched, these combatants go away from homes for months and in some instances years. And what happens after they are gone is that upon return from one operation, they are then taken in for another operation somewhere in another part of the country. According to researchers shown,Militaries can accommodate physical injuries, most especially those sustained in battle; but the traumatic reactions resulting from battle or the risks associated with participating in militaries are injuries most militaries find difficult, if not impossible, to reconcile.The persistent deployment of military personnel across crisis affected areas can hardly be avoided as long as crisis continues to be persistent to in most of these societies.Morespecifically, the study determines the prevalence and experience that increase military vulnerability to developing PTSD. Militaries have largely ignored the psychological impact of combat and combat-like situations on soldiers. Yet, what is now known as Post Traumatic Stress Disorder is something that has long affected soldiers.

1.3 Objectives of the study

1.3.1 General objective

The general objectives of this study is to determine the prevalence and experience of combat- veterans Post traumatic stress disorder (PTSD) among military combatants in armed force comprehensive specialized hospital Addis Ababa Ethiopia.

1.3.2 Specific objectives

- To estimate the prevalence and experience of combat-related Post traumatic stress disorder among respondents.
- To investigate if there is any difference among respondents based on their socio-demographic categories.
- To determine the relationship between PTSD prevalence and combat exposure among respondents

1.4 Research questions

- To what extent do PTSD prevalent among respondents?
- Is there any difference between the prevalence and experience of PTSD among respondents based on their socio-demographic categories?
- Is there a significant relationship between PTSD prevalence and combat exposure experience among respondents?

1.5 Significance of the study

Assessing the prevalence and experience of PTSD is an important issue to overcome the PTSD problems that affect clients` life. It is hopefully believed that the study could be taken as guide to those with PTSD to cope up with the problem and to improve their life.The study will indicate future directions for those professionals and practitioners who are interested in the area.

Even though post- traumatic stress disorder is highly prevalent in military combatant's, very little research attention has been given. The findings of this study would

help National Defense Forces of Ethiopia, Defense ForceHealth Main Directorate as a baseline for planning the necessary actions.

1.6 Operational Definition of terms

Post-Traumatic Stress Disorder (PTSD) - Post-traumatic stress disorder (PTSD) is a mental or psychological health condition that is triggered by a traumatic event either by a person experiencing it or witnessing it happens to someone else .

Combat Exposure-During war, military Service members are exposed to a number of potentially traumatic events. During war, military Service members are exposed to a number of potentially traumatic events.

Combat veterans - veterans that have had direct exposure to acts of military conflict.

CombantantIs a person who:is a member of a national army or an irregular military organization; or is actively participating in military activities and hostilities;

Veterans- veteran refers to a person who has had an experience of service in the Armed Forces

Experience- Experience is comprises knowledge of or skill of combat exposure or some event gained through involvement in or exposure to that combat or event.

1.7 Scope of the study

This study is planed to the determination of prevalence and experience of military combat-related Post traumatic stress disorder in Armed Force Comprehensive Specialized Hospital (AFCSH).

These hospitals serve as teaching for defense university college of health sciences and provide health care services for outpatients and inpatients. The hospitals are well equipped with modern laboratory and have around six case team (psychiatry, internal medicine, surgery, pediatrics, Obstetricand gynecology). The study was confined to military in Armed Force comprehensive, specialized hospital surgical and Psychiatry department in patients (admitted for treatment) and out patients department,the rationale for selecting the study area arises from the fact that armed force comprehensive, specialized hospitals the main referral hospital of defense force in the country and providing available service tomilitary from all parts of Ethiopia.

Chapter Two: Literature Review

This chapter deals with about the overview, sign and symptoms, experience and prevalence of Post Traumatic Stress Disorder.

2.1 Overview of Post Traumatic Stress Disorder

Posttraumatic stress disorder defined as apsychiatric condition that occurs after witnessing or experiencing an event that is traumatic to which one responds with intense fear, apprehension or horror.DSM V, (APA,2013).

Globally, posttraumatic stress disorder has long been recognized as one of the major mental health problems,as author report that affect people with different forms of traumatic experiences rape, accident, community violence, and natural disasters.(Hoge, Castro, Messer, McGurk, Cotting,& Koffman, 2004). Researchers stated that, however, this condition appears to be more common and highly prevalent among war victims, especially military personnel exposed to combat situations. This is not surprising because, the term itself will first noticed after military engagement in the first and second world wars, and became even more popular when the American/Vietnam veterans returned from the war front and serious distress was noticed by their families and community members.Studies show that Military personnel exposed to traumatic events are among the most at-risk populations for PTSD.(Engdahl, Dikel, Eberly,& Blank,1997).Posttraumatic stress disorder is also frequentlyassociated withothermental health problems suchas major depressive disorder,(Stander, Thomsen& Highfill-McRoy,2014).

As zatzick et al reports,Randomly selected SBI eligible acute care medical inpatients (N=878) were evaluated for alcohol, illegal drugs, and symptoms consistent with a diagnosis of posttraumatic stress disorder (PTSD), as authors report 79% of all patients had one or more

alcohol, illegal drug, or PTSD symptom comorbidity. Over 70% of patients receiving alcohol SBI (n=166) demonstrated one or more illegal drug or PTSD symptom comorbidity (Zatzick et al.,2012). And the incidence of posttraumatic stress disorder (PTSD) and depressive illnesses has risen concurrently in the U.S. Army.

2.2 Sign and symptoms of Post Traumatic Stress Disorder

The Diagnostic and Statistical Manual of Mental Disorders, 5th edition (DSM V) provides the clinical criteria for determining PTSD (DSMV, APA 2013) The criteria for PTSD in the DSM-5, released in (2013), delineate a picture of what constitutes a traumatic event. PTSD causes clinically significant distress or functional impairment in an individual's social interactions, work capacity, and ability to carry out his/her normal routine.

As authors report, this stress-related condition is not the result of another medical condition, medication, drugs, or alcohol, and must stem from a traumatic event that adheres to the clinical description. Although previously classified as an anxiety disorder, PTSD is currently classified in the trauma- or stress-related disorder category in the DSM-5, highlighting the recent emphasis on an individual's exposure and reaction to a specific traumatic event. The DSM-5 criteria separate the history of exposure to atraumatic event (referred to as Criterion A) from the symptom clusters (Criteria B through E, discussed further below). DSM V verified, the diagnostic criteria identify the triggering event of PTSD as exposure to actual or threatened death, serious injury, or sexual violation.

The traumatic event may arise from any of the following scenarios in which the individual: directly experiences the traumatic event

As DSM V report, witnesses the traumatic event in person learns that the traumatic event occurred to a close family member or closefriend (with the actual or threatened death being either violent or accidental).

According to researchers report experiences first-hand repeated or extreme indirect exposure to aversive details of the traumatic event (not through media, pictures, television or movies unless work-related).

The DSM-5 groups behavior symptoms into four main clusters: Intrusion, Avoidance, Negative Alternations in Cognitions and Mood, and Alterations in Arousal and Reactivity.19 Three additional PTSD criteria offer a more, DSMV report complete depiction of an individual's case of PTSD: Criterion F addresses the duration of symptoms; Criterion G evaluates the degree of functional significance; and Criterion H determines whether the symptoms are exclusive to PTSD or might occur due to other conditions with similar symptom presentations.

The paragraphs below the table briefly explain the characteristics of the symptom clusters, each of which corresponds to a unique diagnostic criterion (DSM APA 2013). The DSM-5 diagnostic rule requires.

• at least one Criterion B symptom

• at least one Criterion C symptom

• at least two Criterion D symptoms

• according to DSM V report, at least two Criterion E symptoms Criterion F is met (disturbance has lasted one month)

• as DSM V report Criterion G is met (disturbance cause either clinically significant distress or functional impairment).

Intrusion (Criterion B)

Intrusion symptoms, comprehensively, indicate that an individual is having difficulty keeping memories of the traumatic event from resurfacing. For a clinical PTSD diagnosis, an

individual must experience at least one intrusion symptom. Symptoms categorized as "intrusion" cover a wide range and may include any of the following:

•as DSM V report, recurrent, involuntary, and intrusive distressing memories of the traumatic event(s)

• recurrent distressing dreams in which the content and/or affect of the dreamare related to the traumatic event(s)

• as authos shown dissociative reactions (e.g., flashbacks) in which the individual feels or acts as if the traumatic event(s) were recurring

•according to DSM V report, intense or prolonged psychological distress at exposure to internal or external cues that symbolize or resemble an aspect of the traumatic event(s)

• according to authors report,marked physiological reactions to internal or external cues that symbolize or resemble an aspect of the traumatic event(s).

Avoidance (Criterion C)

Broadly, avoidance symptoms constitute behaviors that indicate evasion of triggers or stimuli that might cause memories of the traumatic event. For a clinical PTSD diagnosis, o ne of the following two symptoms must be exhibited after the occurrence of the traumatic

• according to DSM V report, avoidance of or efforts to avoid distressing memories, thoughts, or feelings about or closely associated with the traumatic event(s), and avoidance of or efforts as authors report,to avoid external reminders (people, places, conversations, activities, objects, situations) that arouse distressing memories thoughts, or feelings about or closely associated with the traumatic event(s).

Negative Alterations in Cognition and Mood (Criterion D)

Symptoms in this category cover changes in mood or mental state, which begin or worsen following the occurrence of the traumatic event. For a clinical diagnosis, at least two

symptoms in this category must be exhibited: inability to remember an important aspect of the traumatic event(s)

• as author report,persistent and exaggerated negative beliefs or expectations about oneself, others, or the world.

• according to DSM V report, persistent, distorted cognitions about the cause or consequences of the traumatic event(s) that lead the individual to blame himself/herself or others

• as author shown, persistent negative emotional state (e.g., fear, horror, anger, guilt, or shame)

• researchers verified, markedly diminished interest or participation in significant activities

• feelings of detachment or estrangement from others

• as DSM V shown, persistent inability to experience positive emotions (e.g., happiness, satisfaction, or loving feelings).

Alternations in Arousal & Reactivity (Criterion E)

As DSM V report, symptoms in this cluster include significant changes in arousal and reactivity associated with the traumatic event, changes that begin or worsen after the occurrence of the traumatic event. DSM V verified, to satisfy Criterion E, at least two symptoms must be present:

Duration (Criterion F)

According to DSM V report, Persistence of symptoms (in Criteria B, C, D, and E) has to be for more than one month.

Functional Significance (Criterion G)

DSM V explored, significant symptom-related distress or functional impairment (e.g., social, occupational).

Exclusion (Criteria H)

As authpor reports, Disturbance is not due to medication, substance use, or other illness. Finally, there are two specifications concerning disassociation and onset of symptoms. The diagnostic criteria instruct health providers to specify whether, in addition to meeting the aforementioned criteria for diagnosis, an individual experiences high levels of either depersonalization or derealization in response to stimuli associated with the traumatic event.

As authors report, further, although onset of symptoms may occur immediately after the event, the second specification stipulates that at least six months must have elapsed after the traumatic event before a full diagnosis can be met. Individuals who first display symptoms after six months are considered to have late-onset PTSD and will be classified as having delayed expression in a clinical diagnosis.

2.3 Prevalence of Post Traumatic Stress Disorder

Currently, the lifetime prevalence of PTSD in the United States is 8.3%, as defined by the American Psychiatric Association's Diagnostic and Statistical of Mental Disorders, 5th edition (DSM-5; Kilpatrick et al., 2013). The prevalence of PTSD is especially high in persons exposed to military combat, with a prevalence of 18% in this group (Hoge, Riviere, Wilk, Herrell, & Weathers, 2014).

The prevalence of PTSD among veterans may be higher than the general population. This is because of the ongoing war on terrorism taking place overseas (Priebe et al 2013;Burke, Degeneffe & Olney, 2009) argued that Operation Iraqi Freedom (OIF) and Operation Enduring Freedom (OEF) veterans have recorded an estimated 22% of all combat brain damage injuries/PTSD since the beginning of the war in 2003. An estimated 1.6 million military personnel who were deployed in coordination with OIF/OEF and close to 30,000

troops were wounded in action. This raises a big concern that PTSD among OIF/OEF should be given the necessary attention (Burke, Degeneffe & Olney,2009).

It is however, imperative that the various causes of PTSD among this population (OIF&OEF veterans) be given a careful examination.The PTSD prevalence among Kosovo combat veterans(52.6%) (Halimi, Ramadan,&Hidajete,2014).

This was higher than that in similar studies with Vietnam War veterans (21.5%) and Croatian War veterans (31-41%) (Shiner 2011;Kozariæ-Kovaèiæ, Hercigonja & Grubišiæ-Iliæ, 2001). In their work with Kosovo War veterans have drew some specific details from which the reason for this high prevalence of PTSD can be predicted. Kosovo War veterans were involved in guerrilla resistance against opposing forces; all fighting was near their family homes, with clear evidence of multiple risks for them and their families. Furthermore, factors such as not being adequately equipped, being under continued life risk, being witnesses of massacres against civilians, protecting the large number of deportees have dramatically increased veterans' emotional sufferings, with a direct impact on the later development of lifetime PTSD.

In a study by Ohry et al.,(1996) research reports on patients with traumatic brain injury (TBI), 33% met the criteria for PTSD diagnosis.(Ohry, Rattok, & Solomon, 1996). Shalevet al.,found that 25.5% of injured trauma survivors metPTSD diagnostic criteria at the 6-month follow-up. (Shalev, Peri, Canetti, & Schreiber, 1996).Also, Mora et al., reported a PTSD prevalence of 32% in patientswith explosion-related burns. Furthermore, a prospectivestudy following traumatic events reported that 29.9% of survivors met the criteria for PTSD at 1 month, and 17.5%had PTSD at 4 months (Mora, Ritenour, Wade, Holcomb, Blackbourne, & Gaylord, 2009). As ressearchers stated, the prevalence of PTSD among cluster munition victims was still much higher. They believet hat the injuries resulting from

cluster munition blasts areunique and different from other blast injuries.Our study showed a significant drop in PTSD prevalenceafter 10 years of the trauma incident. According to shalevet et al., Other studies have also shown that, with time, PTSD decreases in prevalence and severity (Shalev et al., 1998).

According to Farhood, the prevalence of PTSD in a general population from southern Lebanonin 2005, on the same population. Findings revealed that PTSD symptoms in the sample dropped from 24.1% in 2005 to 17.9% in 2007 (Banerjee, & Argáez, 2017; Farhood, L. 2014).

As researchers report, in the United States, projected life time risk for PTSD using DSM-IV criteria at age 75 yearsis 8.7%. Twelve-month prevalence among U.S. adults is about 3.5%. Lower estimates are seen in Europe and most Asian, African, and Latin American countries, clustering around0.5%, (DSM-5-TR APA, 2013). Rates of PTSD were higher among veterans and others whose vocation increases the risk of traumatic exposure (e.g., police, firefighters, emergency medical personnel). Highest rates (ranging from one-third to more than onehalfof those exposed) are found among survivors of rape, military combat and captivity,and ethnically or politically motivated internment and genocide. The prevalence of PTSDmay vary across development children and adolescents, including preschool children,generally have displayed lower prevalence following exposure to serious traumaticevents; however, this may be because previous criteria were insufficiently developmentallyinformed.

The prevalence of full-threshold PTSD also appears to be lower amongolder adults compared with the general population; there is evidence that subthresholdpresentations are

more common than full PTSD in later life and that these symptoms areassociated with substantial clinical impairment. Compared with U.S.

As Kilpatrick reports, non-Latino whites,higher rates of PTSD have been reported among U.S. Latinos, African Americans, andAmerican Indians, and lower rates have been reported among Asian Americans, after adjustmentfor traumatic exposure and demographic variables. Although prevalence rates for the general population have beenestimated to be 4.7% in terms of symptoms in the past 12 months, and 8.3% in terms of lifetime prevalence (Kilpatrick, Resnick, Milanak, Miller, Keyes, & Friedman, 2013). rates in high-risk occupations aresubstantially higher. For example, the rates of PTSD in police officers were estimatedto be 13% (Robinson, Sigman, & Wilson, 1997). while the rates of PTSD in firefighters were estimated to be 17% (Bryant,&Harvey, 1995).

As authors reports, more recently, (O'TOOLE, et al,1996), compared the prevalence of PTSD across different occupations involved in rescue and recovery work at the World trade Center site. The overall prevalence of PTSD among rescue and recovery workers 2–3 years after the disaster was 12.4% but ranged from 6.2% for police to 21.2% for unaffiliated volunteers (Perrin, DiGrande, Wheeler, Thorpe, Farfel, & Brackbill, 2007). Concluded that workers and volunteers in occupations least likely to have had prior disaster training or experience were at greatest risk of PTSD, underscoring the importance of occupational context in terms of PTSD risk.Just like emergency service personnel, military personnel are also exposed to significant dangers that can elevate their risk of PTSD and related outcomes. The rates themselves vary depending on the assessment context, the extent of combat-related events, and a range of unit and demographic factors.

This chapter details the prevalence of combat-related PTSD taking these variables into account. These estimates are important for predicting the psychological toll that military

service may have in order to (Gubata, Cowan, Bedno, Urban, & Niebuhr, 2011). Anticipate mental health resource needs in target populations, document personal or occupational variables that may drive the development of PTSD symptoms, and identify opportunities for training and early intervention that might reduce the likelihood of service members experiencing PTSD. The Vietnam and Gulf War principal study of PTSD prevalence among US Vietnam veterans was conducted more than a decade after the war ended. The National Vietnam Veterans Readjustment Study (NVVRS) surveyed more than 1,000 veterans and conducted in-depth diagnostic interviews with a subsample of 260 veterans. This multimethod approach was used in combination to develop current and lifetime prevalence rates of PTSD (Kulkaet al.,1990).According to the NVVRS, approximately 15% of male and 9% of female Vietnam veterans met the criteria for current PTSD. Furthermore, the NVVRS-estimated prevalence of lifetime PTSD was approximately 31% for males and 27% for females .Dohrenwend et al.reexamined the NVVRS data years later to address criticisms of the original analysis. In their reanalysis of a subsample of NVVRS veterans who had been interviewed in the original study.

As report of Dohrenwend et al. examined external evidence of exposure to combat-related events as well as degree of functional impairment and possible symptom exaggeration to calculate adjusted PTSD rates (Dohrenwend, Turner, Turse, Adams, Koenen, & Marshall, 2006).

Although the adjusted rates were lower than previously estimated, the rates remained substantial with 9.1% of veterans meeting criteria for current PTSD and 18.7% of veterans meeting criteria for lifetime prevalence. Thus, even using more sophisticated techniques (including cross-referencing news reports of combat), the rates of PTSD in Vietnam veterans remain significant. 5–6 years after the war. Approximately 12% of Gulf War veterans

reported PTSD compared to 4% of non-Gulf veterans. Similarly, Lee and colleagues reported that 12% of the 3,000 British veterans who sought advice from the Gulf Veterans' Medical Assessment Programme were clinically diagnosed with PTSD (Lee, Gabriel, Bolton, Bale, & Jackson, 2002).

As researcher`s findings, prevalence estimates were also calculated for Australian veterans of the Gulf War. In their analysis of structured interviews with 1,871 veterans (Ikin et al., 2004).reported rates of new-onset PTSD were 5.4%. Taken together, estimated PTSD prevalence rates were lower following the Gulf War than the Vietnam War, demonstrating the impact that the nature of the conflict had on subsequent adjustment of veterans.

According to researcher reports, more recent Afghanistan and Iraq studies estimates of combat-related PTSD have been conducted with service members who deployed to Iraq and Afghanistan. Just as in the case of estimating PTSD prevalence with Vietnam veterans, there are several variables that affect these estimates following deployment to Iraq and Afghanistan. For example, the sample studied, the assessment methodology (clinical interviews versus self-report measures), and the timing of data collection can all influence resulting prevalence estimates (Maguen, Suvak& Litz,2006;Maguen et al., 2010).

For adiscussion of methodological issues associated with PTSD measurement. Population-based studies arguably provide the most reliable estimates of PTSD prevalence. To that end (Smith, Ryan, Wingard, Slymen, Sallis, & Kritz-Silverstein, 2008). used data from the Millennium Cohort Study to assess the prevalence of PTSD using the PCL with a strict definition of PTSD (defined as scoring at least 50 on the PCL and according to the DSM-IV algorithm). In this prospective survey of more than 50,000 US service members who deployed to Iraq or Afghanistan , individual responses were not anonymous, but confidentiality was assured. The prevalence rate of new-onset PTSD was in the range of 7.6–

8.7% for deployers who reported any level of combat exposure, 1.4–2.1% for deployers who did not report combat exposure, and 2.3–3.0% for non-deployers (Boulos & Zamorski, 2016). Reported on results of structured interviews with Canadian Armed Forces personnel and found an estimated PTSD prevalence rate of 7.7% among those who had deployed to Afghanistan in the past year, compared to 3.2% who had not. These results were comparable to those reported by the Millennium Cohort Study.This study examined the prevalence of PTSD within a sampleof active duty servicemember Sanity Boards. 13.1% of SanityBoard referrals were diagnosed with PTSD. This prevalenceclosely approximates the estimates of PTSD within Westernmilitary populations, which is given at 13.2% (Hines, Sundin & Rona et al.,2014).

As miller reports the currentfinding is also lower than the 15% prevalence rate estimatedfor persistent and severely disabling PTSD (Miller, 2012). The finding that PTSD occurs in 13.1% of Sanity Board evaluations suggeststhat forensic practitioners, either active duty or civilian, frequentlyencounter PTSD for questions related to CST or CR.

This prevalence nonetheless contrasts with evidence suggestingthat PTSD is a more prolific disorder among veteransinvolved in the legal system (Cohen, & Appelbaum, 2016; Fulton et al.,2015). One reason for the difference may be the possibility that servicemembers with PTSDare separated from active duty before encountering the militaryjustice system. This may result in servicemembers leavingactive duty with ongoing or untreated symptoms, whichmay increase their chances of interfacing with the criminaljustice system as veterans.

The diagnosis of PTSD was considered a “severe mentaldisease or defect” 30% of the time. This rate occurreddespite no standard set of criteria for forensic practitioners toopine whether a disorder was a severe mental disease ordefect. According to researchers report In Afghanistan, prevalence estimates forPTSD 20%-42% (Cardozo et al., 2004; Scholte et al.,

2004). Amore recent study conducted by Ayazi estimated the prevalencerate of PTSD as 26% in the southern Sudanesepopulation (Ayazi, Lien, Eide, Swartz, & Hauff, 2014). The authors shown, Suffice to say that previous studies among Nigerian military have revealed an astronomical rise in prevalence from 12-22% after combat deployment to Liberia, Sierra-Leone and Darfur region of Sudan (Okulate, & Jones, 2006;Ameh, Kazeem, Abdulkarim, & Olasupoo, 2014).

Research fromin recent studies, higher prevalence of 33% has been reported in African setting on a study involving south-African military personnel (Connell, 2011).

A study conducted by Seedat, Le Roux and Stein on South African National Defence Forcesoldiers on their return from a peace-keeping mission in Rwanda in 2003 showed a prevalencerate of 26% for PTSD in these troops (Seedat, Roux, & Stein, 2003).

Okulate and Jones (2006) conducted a study on 1136 Nigerian soldiers involved in peace-keepingmissions in Sierra-Leone and Liberia, who were admitted to an army hospital in Lagos.(Okulate, & Jones, 2006).

In Uganda a cross-sectional study of 2,875 individuals who had fought in the Lord's Resistance Army (LRA) was performed by Pham et al.,(2009).Respondents were selected interms of a multistage stratified cluster sampling design conducted in 8 districts of northern Uganda.The convenience sampling design precluded any measure of response rate. Aself-reportinstrument, the PTSD Checklist for civilians (PCL-C) was used to determine the presence of PTSD.The relatively high cut-off score of 44 was used. This study reported a PTSD prevalence rate of56% (Pham,Vinck,& Stover, 2009). Astudy on 20 former Sri Lankan child soldiers all recruited before the age of 18 years and living inexile in Norway showed a mean score on the IES-R of 43. This suggests that 50% of thispopulation have PTSD

(Kanagaratnam,Raundalen,& Asbjørnsen, 2005). Convenience sampling with a 100% response rate was reported for thisstudy, but there was no possibility of achieving a representative sample. This study is of interestsince it used the same psychometric instrument, and showed a PTSD level in this sample which ismuch greater than the reported prevalence in the NVVRS, the VES and the later Gulf and Iraqiwars.

2.4 Experiences of Post Ttraumatic Stress Disorder

Post-traumatic stress disorder (PTSD) is predicated on the experience of traumatic events (DSM–IV-TR APA, 1994).

Military personnel exposed to traumatic events are among the most at-risk populations for PTSD (Engdahl, Dikel, Eberly, & Blank 1997). The exposure to combat or witnessing atrocities is insufficient to explain the development of suicidal behavior in military personnel that cannot be explained on the basis of the diagnosis of mental disorder (Belik, Stein, Asmundson, & Sareen, 2009). US human trauma exposure, having survived a close call, having a buddy killed/injured, having killed enemy, having killed friendly/nonhostile forces, and pride in mission (Killgore,et al.,2008). they are essentially similar to those proposed by Fontana and Rosenheck with the exception of Killgore and colleague's delineation between US human trauma and buddy injured/killed.Fontana and Rosenheck categorized five types of combat exposure: (1) fighting, (2) killing, (3) perceived threat to self, (4) death/injury of others, and (5) atrocities.(Fontana and Rosenheck,1998). In contrast, King et al. had fewer categories and combined fighting, killing, and exposure to death into one category (King , King , Gudanowski , &Vreven,(1995). As researchers report, Veterans with trauma exposure and PTSD are more susceptible to sleep disorders, mood changes, reckless behavior, substance use and isolation which may impede a successful transition from military to civilian life (Muller, Ganeshamoorthy, Myers, 2017; Xue, et al., 2015).

Extensive research identifies combat exposure as a strong predictor of health and psychological complications in veterans due to the risk of physical injury, psychological trauma and other stressors related to war (Amdur, et al, 2011; Buttner, et al, 2017).

Their report shows, a recent study examined associations between combat exposure and physical and psychological health focusing on the physical pain, PTSD and depression in veterans. The findings indicate that veterans exposed to combat had greater pain intensity and as a result higher PTSD and depression symptoms in comparison veterans without combat exposure (Buttner,et al., 2017). Post-Traumatic Stress Disorder (PTSD) is recognized byforensic psychiatrists as a basis for criminal defenses (Cohen, &Appelbaum, 2016). surveyed 238 forensic psychiatrists abouttheir experience with PTSD among forensic cases. Theyfound that 30% had experience with over 10 PTSD casesand 50% had experience with at least 1 PTSD case (Fulton et al.,2015). Morethan 1 in 3 of the PTSD cases surveyed were related tocombat-exposure from the Iraq and Afghanistan wars. Thesymptoms of PTSD, such as dissociation, flashbacks, sleepdisturbance, and mood lability, have successfully factoredinto defense strategies (Friel, White, & Hull, 2008;Wilson, & Zigelbaum, 1983).

2.5 Causes of Post Ttraumatic Stress Ddisorder

There are many causes of PTSD among veterans, ranging from family or internal to external events (Haley,Maddrey, & Gershenfeld, 2002). The development of PTSD can beinfluenced by a person's genetic make-up or biology (Priebeet al., 2013).have argued that in a community of post war veterans, the cause of PTSD may be due to the exposure of traumatic events, like explosions, losing close comrade friends on the battle field, the stress of prolonged separation from family and loved ones and the weary of war in general.

However, the above mentioned factors are not the only causes of PTSD among veterans.Researchers have indicated that, prolong family separation, the fear and anxiety of

eminent danger, high level of stress, death, and injuries are among some of the causes of PTSD in the military population (Priebeet al.,2013;Canetti,Galea, Hall, Johnson, Palmieri, & Hobfoll,2010).In addition, traumatic events like rape, explosions, prolonged hunger, resulting from war can impact the general public to experience PTSD (Canetti,Galea, Hall, Johnson, Palmieri, & Hobfoll,2010). Other risk factors for PTSD for combat veterans include factors related to specifically deployment. According to (Richardson, Long, Pedlar, & Elhai, 2008),the intensity, duration of combat, personal vulnerability, other war zone experiences and sociocultural factors include personal factors such as age, gender, intelligence, education, adversity as a child, traumatic life events, family history of psychological disorders and personality can significantly contribute to PTSD (Haley, Maddrey, & Gershenfeld, 2002).Post military factors are also risk factors for PTSD. According to (Canetti,et al., 2010). veterans who were previously deployed to combat zone may present individual symptoms and without social support, they may be affected by social and political environment.

Chapter Three: Method of the study

3.1 Research design

This research utilized a descriptive quantitative, approach to collect primary data, from April, 2020. Quantitative research involves the collection of numerical data in order to describe phenomena,

3.2 Study Area

The study was conducted from the ministry of national defense force hospitals, namely armed force comprehensive, specialized hospital (AFCSH) previously it was named by Emperor Haile Selassie founded the Princess Tsehai Memorial Hospital in her memory, which also served as a nursing school. After the 1974 revolution, the hospital was renamed as the Ethiopia Armed Forces General Hospital. These hospital serve as teaching for defense university college of health sciences and provide health care services for outpatients and inpatients.

The hospital is well- equipped with modern laboratory and has around six case team (psychiatry, internal medicine, surgery, pediatrics, obstetrics and gynecology. The study was confined to military in Armed Force comprehensive, specialized hospital surgical and psychiatry department in patients(admitted for treatment) and out patients department,the rationale for selecting the study area arises from the fact that armed force comprehensive, specialized hospital is the main referral hospital of defense force in the country and providing available service to military from all parts of Ethiopia.

3.3 Study population

The Population of this study was military combatants in Armed Force Comprehensive, Specialized Hospital Addis Ababa,Ethiopia.The total population are military, approximately

582 with combat-related victims from surgical and psychiatry unit admitted client in hospital, and out clients unit, from those population 85 sample was selected for study.

3.4 Sample size and sampling techniques

Convenience sampling technique was used to select the study subjects from all military clients who fulfil the inclusion criteria in AFCSH surgical and psychiatry units in and out clients on treatment during study period attended 85 clients from 582 estimated study population.The participants were 55 clients from surgical and 30 clients from psychiatry unit presented and participated to fill data.

The sample size for this study was calculated by Yamane formula, of

$$n = \frac{N}{1+N\,(e)^2}$$

The formula used for our population, in which N =582 with ±10% precision. Assuming 95% confidence level and p =0.5, the resercher take 15% sample from estimated target population gets sample size as

$$N = \frac{582}{1+582(0.01)^2} = 85$$

3.6 Data collection instruments

Data was collected from respondents via descriptive quantitative means with the aid of structured questionnaires,of post-traumatic stress disorder checklist (PCL-5),demographics form measured gender,age, education, military service information (e.g., military grade),and other participant characteristics, PCL-5 Reliablity in this instrument was .896 and CES .672.

The PCL-5 is a 20-item self-report measure that evaluates the degree to which an individual has been bothered in the past month by DSM–5 PTSD symptoms tied to his or her

most currently distressing event (Weathers et al., 2013). The total prevalence score can be categorized in to the score with <33 is normal range and that 33 and above is PTSD range.

The questionnaire with 7 items measures combat exposure experience to traumatic event for PTSD. Items are rated from 0 (not at all) to 4 (extremely) and are summed for a total severity score.

Subscale severity scores are calculated by summingitems in each of the four DSM–5 PTSD symptom clusters: intrusions(Items 1–5), avoidance (Items 6–7), negative alterations in cognitions and mood (NACM; Items 8–14), and alterations in arousal and reactivity (AR; Items 15–20). PTSD caseness was defined as endorsing a severity of at least a 2 (moderate) for a sufficient number of symptoms in each cluster to meet DSM–5criteria. At the time this study began, only a draft version of the PCL-5 was available. Minor wording differences between the version of the PCL-5 used in this study and the currently published version are described in the online supplemental materials. The results showed the PCL-5 has good internal consistency ($\alpha = .91$), test–retest reliability ($r = .61$), and concurrent, convergent, and discriminant validity with the Harvard Trauma Questionnaire ($r = .69$) Ghazali, & Chen, (2018). As researchers report, interitem correlations were analyzed as an additional index of internal consistency. As authors report, In general, these fell in the recommended range of .15 to .50 (Clark & Watson, 1995), with a range of .10 to .74.

The Combat Exposure Scale (CES) developed by Keane et al., is a 7-item self-report measure that assesses wartime stressors experienced by combatants. Items are rated on a 5-point frequency (Keane et al., 1989).

Description

The Combat Exposure Scale (CES) is a 7-item self-report measure that assesses wartime stressors experienced by combatants. Items are rated on a 5-point frequency (1 = “no” or “never” to 5 = “more than 50 times”), 5-point duration (1 = “never” to 5 = “more than 6 months”), 4point frequency (1 = “no” to 4 = “more than 12 times”) or 4-point degree of loss (1 = “no one” to 4 = “more than 50%”) scale.

Respondents are asked to respond based on their exposure to various combat situations, such as firing rounds at the enemy and being on dangerous duty. The total CES score (ranging from 0 to 41) is calculated by using a sum of weighted scores, which can be classified into 1 of 5 categories of combat exposure ranging from “light” to “heavy.” The CES was developed to be easily administered and scored and is useful in both research and clinical settings, with reliability of .672.

The researcher reported, Answers (raw scores) on the Combat Exposure Scale can range from 1 to 5. However, the scoring of the items requires the conversions described below:

(1) Subtract 1 from the raw score and multiply by 2
(e.g., a raw score of 4 becomes a converted score of 6). 1

(2) Subtract 1 from the raw score
(e.g., a raw score of 4 becomes a converted score of 3). 2

(3)'If the raw score is between 1 and 4: subtract **1** from the raw score and multiply by 2
(e.g., a raw score of 4 becomes a converted score of 6).

'If the raw score is 5: subtract 2 from the raw score and multiply by 2
(e.g., a raw score of 5 becomes a converted score of 6). 3

(4) 'If the raw score is between 1 and 4: subtract 1 from the raw score
(e.g., a raw score of 4 becomes a converted score of 3).

'If the raw score is 5: subtract 2 from the raw score
(e.g., a raw score of 5 becomes a converted score of 3). 4

(5)Subtract **1** from the raw score (e.g., a raw score of 4 becomes a converted score of 3). 5

(6) Subtract 1 from the raw score and multiply by 2
(e.g., a raw score of 4 becomes a converted score of 6). 6

(7) Subtract 1 from the raw score and multiply by 2
(e.g., a raw score of 4 becomes a converted score of 6). 7

Add all converted scores to obiain a total score : Total ————

The total exposure to combat score can be categorized the score with <33 normal rang and 33-41-heavyor high score. Respondents are asked to respond based on their exposure to various combat situations, such as firing rounds at the enemy and being on dangerous duty.

3.7 Pilot study

The researcher conducted pilot study of approximately 160 total population selected with connivance sampling technique 35 respondents (male=30 and female=5) from sarbet war disability center, which is outside of a target population ofthe actual study. The respondents have similar background with the actual target population of the study. After the responses were coded and entered to SPSS, the crombach alpha reliability coefficient of pilot study was found.Ahigh result indicates more post-traumatic stress symptoms. Cronbach alpha in this sample was .901 and CES was .687.

3.8 Data Analysis Method

The researcher used Statistical Package for the Social Sciences (SPSS) version 23 for entry and statistical analysis where descriptive statistics like percentage, frequencies, Chi-square and pearson correlation from inferential statistics were used. This research was used to

analyze the relationship between the independent variable, which is PTSD and the dependent variable,which is CES. The relationship between the above mentioned variables were investigated through survey questions, which were given to the veterans to answer. It is imperative that the results were interpreted well in a quantitative research that measure and categorize some characteristics like age,service branches, education status, marital status and department of respondents.

3.9 Ethical consideration

The researcher also obtained permission first from school of psychology then from the hospital chief officer command to get informed consent of the participants. Then after, the purpose of the study was briefly explained to all the participants with the assurance that the information given treated with confidentiality,of the deployed military client responses and strict adherence to individual privacy was fully assured. They were individually informed that their participation was voluntary and that they could withdraw from the study at any time without prejudice.

During the data collection time the researcher takes safety aware measure to respondents to prevent COVID19 with social distance of 2 meter between individual according to WHO recommendations, effective hand washing with hand soap for 20 second before and after data collection , use sanitizer beforeand after data fill, appropriat mask use and white duplicated paper for 6 days before data selection days in cleaned area.

Chapter Four: Findings of the study

This chapter presents the finding in three main sections. Begin with descriptive results of socio demographic. Second, the descriptive results of the prevalence of PTSD and third, result of combat exposure experiences were presented.

4.1 socio demographic characteristic

A total of 85 military clients was selected for the study and completed the questionnaires (100%). Demographic and military service variables in the full sample (*85*). Table 1, shows the majority age were 18-29, 48 (56.5%), table 2.shows the majority of participants 78(91.8) were male soldiers clients of enlisted (lower rank) military grade. This is due to higher male population in the military the more participated, table 3 Shows that male and female with increased almost equal single and married in their response. As table 4 Shows, 60(76.9%) male lower rank status; table 5 indicated that 50 (64.1%) were grade 8-12 male respondents.

Table 1: Age of respondents

Age Variables	Frequency	Percent
18-29	48	56.5%
30-41	30	35.3%
42-53	7	8.2%
Total	85	100%

Table 2： Gender of respondents

Gender	Frequency	Percent
Male	78	91.8%
Female	7	8.2%
Total	85	100%

Table 3: Marital status of respondents

Gender	Status	Frequency	Percent
Male	Single	38	48.7%
	Married	37	47.4%
	Divorce	3	3.8%
	Total	78	91.8%
Female	Single	3	42.9%
	Meried	4	57.1%
	Total	7	8.2%

Table 4: Rank of the respondents

Gender	Rank of the client		Total
	lower rank	Officer	
Male	60 (70.6%)	18 (23%)	78 (91.8%)
Female	5 (71.4%)	2 (28.6%)	7 (8.2%)
Total	65 (76.5%)	17 (20.0%)	85 (100.0%)

Table 5: Educational status of respondents

	Educational status			Total
	Grade 8_12	Deploma	Degree	
Male	50 (64.1%)	22 (28.2%)	6 (7.7%)	78 (91.8%)
Female	2 (64.1%)	3 (42.9%)	2 (28.6%)	7 (8.2%)
Total	52 (61.2%)	25 (29.4%)	8 (9.4%)	85 (100.0%)

4.2 The prevalence of PTSD checklist (pcl-5) scale –revised

The PTSD prevalence was 57.6% among this population,49 respondents result illustrates the positive screen rate of probable PTSD among respondents,confirms that more participants meet DSM 5 criteria for PTSD among military clients with different socio demographic data who screened positive for PTSD.

Table 6:Descriptive Statistics of prevalence of PTSD among respondents

Pcl-5 score	Frequency(n)	Percent
Normal Range(32 Or Less	36	42.4%
PTSD Range(33 Or More)	49	57.6%
Total	85	100%

As shown in above table 6, 36 (42.4%) respondents are with normal range while 49 (57.6%) respondents are with PTSD. Therefore, these results indicated that the prevalence of PTSD is manifested on more than half of respondents, 49 (57.6%) of this study.

Table 7: Descriptive Statistics of prevalence of PTSD among respondents by age

Age of client	Levelof prevalence					
	Normal range		PTSD range		Total	
	N	Percent	N	percent	N	Percent
18-29	19	39.6%	29	60.4%	48	56.5%
30-41	13	43.3%	17	56.7%	30	35.3%
42-53	4	57.1%	3	42.9%	7	8.2%
Total	36	42.4%	49	57.6%	85	100

As the results in above table 7 indicated, 29 (60.4%) respondents of 18-29 age, 17 (56.7%) respondents of 30-41 age and 3 (42.9%) respondents of 42-53 age are with in the prevalence rang of PTSD. These results revealed that the prevalence of PTSD is more among respondents whose age is 18-29.

Table 8: Descriptive Statistics of prevalence of PTSD among respondents by gender

Gender ofclient	level of prevalence					
	Normal range		PTSD range		Total	
	N	Percent	N	Percent	N	percent
Male	33	42.3%	45	57.7%	78	91.8%

Female	3	42.9%	4	57.1%	7	8.2%
Total	36	42.3%	49	57.6%	85	100%

As shown in above table 8, 45 (57.7%) males and 4 (57.1%) females are with in the range of PTSD. The resulns indicated that the prevalence of PTSD is relatively similar among male and female respondents.

Table 9: Descriptive Statistics of prevalence of PTSD among respondents by service branch

service banch of client	level of prevalence					
	Normal range		PTSD range		Total	
	N	Percent	N	Percent	N	percent
Air force	8	47%	9	52.9%	17	20%
Ground force army	28	41%	40	68%	68	80%
Total	36	42.3%	49	57.6%	85	100%

As revealed in above table 9, 9 (52.9%) respondents from air force and 40 (68%) respondents from ground force army are with in PTSD range. The results indicated that the prevalence of PTSD is more among ground force army than air force army respondents and the majority of respondents, 49 (57.6%) are with in PTSD range.

Table 10: Descriptive Statistics of prevalence of PTSD among respondents by rank

Rank of respondents	level of prevalence			
	Normal range		PTSD range	
	N	Percent	N	Percent
lower rank	27	41.5%	38	58.5%
Higher rank officer	6	30%	14	70%

As shown in above table 10, 38 (58.5%) of respondents from lower rank and 14 (70%) respondents from higher rank officer are with in PTSD range. The result indicated that the prevalence of PTSD is more among both lower rank and higher rank respondents.

Table 11: Descriptive Statistics of prevalence of PTSD among respondents by marital status

Marital status of the client	level of prevalence					
	Normal range		PTSD range		Total	
	N	Percent	N	Percent	N	Percent
Single	21	51.2%	20	48.8%	41	48.2%
Married	15	36.6%	26	63.4%	41	48.2%
Divorce	0	0	3	100%	3	3.5
Total	36	42.4%	49	57.6	85	100

As revealed in above table, 20 (48.8%) respondents from single, 26 (63.4%) respondents from married and 3 (100%) respondents from divorce marital status are with in PTSD range. The results indicated that the prevalence of PTSD is more among married respondents than single one and it is the most among divorce respondents.

Table 12: Descriptive Statistics of prevalence of PTSD among respondents by educational status

Educational Status	levels of prevalence					
	Normal range		PTSD range		Total	
	N	Percent	N	Percent	N	Percent
8_12	20	38.5%	32	61.5%	52	61.2%
Deploma	11	44%	14	56%	25	29.4%
Degree	5	62.5%	3	37.5%	8	9.4%
Total	36	42.3%	49	57.6%	85	100%

As indicated in above table 12, 32 (61.5%) respondents from grade 8-12, 14 (56%) respondents from diploma and 3 (37.5%) respondents from degree educational status are with in PTSD range. This result revealed that PTSD prevalence is more at educational status of grade 8-12.

Table13: Descriptive Statistics of prevalence of PTSD among respondents by department

Department	Levels of prevalence			
	Normal range		PTSD range	
	N	%	N	%
Surgical	25	45.5	30	54.5
Psychiatry	8	26.7	22	73.3

As the result indicated in above table, 25 (45.5%) of respondents from surgical department are with normal range whereas 30 (54.5%) of respondents are with PTSD. 8 (26.7%) of respondets from psychiatry department are with normal range whereas 22 (73.3%) of respondents are with PTSD range. Thus, majority of respondents from both departments are with PTSD range and the prevale is more among Psychiatry department respondents.

4.3 Combat Exposure

Table14: Combat exposure

Exposure	Frequency	Percent
Normal range	52	61.2%
Combt exposure	33	38.8 %
Total	85	100 %

As shown in above table 14, 33 (38.8%) of respondents experienced combat exposure of PTSD while 52 (61.2%) respondents are with in normal range of PTSD experience. This indicated that the majority of respondents are with in normal range.

Table 15: Combat exposure of PTSD among respondents by age

Age	Combat exposure level				Total	
	Normal		Exposure			
	N	Perecent	N	Percent	N	Percent
18-29	26	54.2%	22	45.8%	48	56.5%
30-41	20	66.7%	10	33.3%	30	35.3%
42-52	6	85.7%	1	14.3%	7	8.2%
Tota	52	61.2%	33	38.8%	85	100.0%

As shown in above table 15, 22 (45.8%) respondents at age 18_29, 10 (33.3%) respondents at age 30-41, and 1 (14.3%) respondents at age 42-52 experienced PTSD. The results in above table indicated that respondents at age of 18-29 are more exposed to combat exposure experience of PTSD than other age categories.

Table 16: Combat exposure of PTSDamong respondents by gender

Gender of client	Combat exposure level					
	Normal		Exposure		Total	
	N	Perecent	N	percent	N	Percent
Male	46	59%	32	41%	78	91.8%
Female	6	85.7%	1	14.3%	7	8.2%
Total	52	61.2%	33	38.8%	85	100.0%

As shown in above table 16, 32 (41%) male respondents and 1 (14.3%) female respondents experienced PTSD exposure. The exposure experience of PTSD is higher among male than female respondents.

Table 17: Combat exposure of PTSD among respondents by service branch

Service branch	Combat exposure level					
	Normal		Exposure		Total	
	N	Perecent	N	Percent	N	Percent
Air force	14	82.4%	3	17.6%	17	20.0%

Ground force army	38	55.9%	30	44.1%	68	80.0%
Total	52	61.2%	33	38.8%	85	100.0%

As revealed in above table, 3 (17.6%) respondents from air force and 30 (44.1%) respondents from ground force experienced PTSD. The results indicated that ground force army respondents were more exposed than airforce.

Table 18：Combat exposure of PTSD among respondents by rank

Rank of client	Combat exposure level					
	Normal		Exposure		Total	
	N	Perecent	N	Percent	N	Percent
lower rank	36	55.4%	29	44.6%	65	76.5%
Higher rank officer	16	80%	4	20%	20	23.5%
Tota	52	61.2%	33	38.8%	85	100.0%

As shown in above table 18, 29 (44.6%) respondents from lower rank and 4(20%) respondents from higher rank officer experienced PTSD. The result indicated that lower rank respondents were more exposed to PTSD than higher rank officers.

Table 19: Combat exposure of PTSD among respondents byMarital status

Marital status of the client	Combat exposure level					
	Normal		Exposure		Total	
	N	Perecent	N	Percent	N	Percent
Single	23	56.1%	18	43.9%	41	48.2%
Married	29	70.7%	12	29.3%	41	48.2%
Divorce	0	0.0%	3	100%	3	3.5%
Total	52	61.2%	33	38.8%	85	100.0%

As the results in above table indicated, 18 (43.9%) single, 12 (29.3%) married and 3 (100) divorced respondents experienced PTSD. These results revealed that unmarried (single) respondents were more exposed to PTSD than the married one and all divorced respondents were exposure to PTSD.

Table 20: Relationship between respondents by department regarding PTSD

Dept.	PTSD level				
	Normal	PTSD range	X^2 – value	Df	P-value
Surgical	25	30	2.851	1	0.091
Psychiatry	8	22			

The above table showed the relationship between department of respondents and PTSD exposure in determination of respondents. At p> 0.05, chi-square value= 2.851, difference (Df) =1 and Pearson coefficient (P-value) =0.091, there was no statistical significant relationship between department and PTSD exposure with respect to respondents.

Table 21: The relationship between combat exposure and prevalence of PTSD among respondents

Variables	Range				
	Normal	PTSD range	X^2 – value	Df	P-value
Combat exposure	53	33	11.198	1	0.001
PTSD prevalence	36	49			

The above table showed the relationship between combat exposure and PTSD prevalence among respondents. At p< 0.05, chi-square value= 11.198, difference (Df) =1 and Pearson

coefficient (P-value) =0.001, there was a statistical significant relationship between combat exposure experience and PTSD prevalence among respondents.

Chapter Five: Discussion of the study

This part of the study was discussing the result of the present study in relation to some previous research findings and the research questions. This study focused on different categorical status of military clients socio, demographic, prevalence and experience of post traumatic stress disorder among armed force comprehensive, specialized hospital in psychiatry and surgical ward clients who were admitted (in client) and out clients.

5.1 Socio-demographic characteristics of participants

The respondents completed the distributed questionnaire, 85 (100%) properly and returned it to the researcher. About two thirds of the respondents were male participants, 78 (91.8%), this indicated male more populated in combat; the majority of service branches were ground force army, 68(80%) and the lower rank clients were large in number, 65(76.5%) from rank category; the majority of respondents were found in 18-29 age group, 48(56.5%) . The findings in previous study supported these results, for example, research conducted by Jordan, et al. (1992) revealed that veterans with PTSD were younger.

5.2 Prevalence of PTSD

The overall Prevalence of PTSD in this study was 57.6% and this is similar with the findings in previous studies by amanuel mental health hospital graduated carried out among those population where prevalence of PTSD was found to be 20% (Hisabu, 2013). And compared with international Studies of Kosovo 52.6%, (Halimi et al., 2014), Srilanka, 50%, (Kanagaratnam, et al., 2005), Uganda 56%, (Pham, et al., 2009). This implies that the level of PTSD prevalence among military respondents increases from time to time.

The results showed that the prevalence of PTSD is more among respondents whose age is 18-29, 29 (60.4%). Regarding the gender, results implied that the prevalence of PTSD is relatively similar on male respondents, 45 (57.7%) and on female respondents, 4 (57.1%).

The prevalence of PTSD is more among ground force army, 40 (68%) than air force army respondents, 9 (52.9%). Regarding rank, the prevalence of PTSD is more in lower rank respondents, 36 (58.5%) than higher rank category, 14 (70%). This finding is similar with the previous study conducted by Hisabu (2013) and stated that the odds of PTSD among soldiers with lower rank were two times more likely to develop PTSD as compared with those solidiers who were officers with higher rank. Incontrast, the findings of previous study conducted by Andre (2013) indicated that the prevalence is more among higher rank than lower rank.

Again, the results of this study showed that the prevalence of PTSD is more among married respondents 26 (63.4%) than single one, 20 (48.8%) and the prevalence is the most on divorced respondents. Similar result was indicated in previous study done by Martin (2011) and revealed that the prevalence was more among married respondents. It also indicated that PTSD prevalence is more at educational status of grade 8-12, 32 (61.5%) than other categories in educational status. This result contrasts with previous study result done by Martin (2011) that indicated the prevalence was more among tertiary level education respondents. Regarding respondents department, the prevalence of PTSD is more among psychiatry department than surgical one.

5.3 Combat exposure

Exposure to a traumatic event means that the person has experienced, witnessed or been confronted with an event that involves actual or threatened death, a serious injury, or a threat to the physical integrity of one self or others.

As the results indicated, the overall of combat exposure experience among respondents in this study was 33 (38.8%). The respondents at age of 18-29, 22 (45.8%) were more exposed to combat than other age categories. Male respondents, 32 (41%) have higher

exposed experience of PTSD than female respondents do, 1 (14.3%). The ground force army respondents, 30 (44.1%) were more exposed than airforce, 3 (17.6%). The lower rank respondents, 29 (44.6%) have more exposed to combat experience than higher rank category, 4 (20%). Again, as the results indicated, single marital status respondents, 18 (43.9%) are more exposed to combat experience than other marital status categories.

Regarding the relationship between combat exposure and PTSD prevalence among respondents in this study, at $p< 0.05$, chi-square value= 11.198, difference (Df) =1 and Pearson coefficient (P-value) =0.001, there was a statistical significant relationship between combat exposure experience and PTSD prevalence among respondents. The scores for PTSD were significantly associated with combat exposure. This finding is supported by the findings of Martin (2011). There is consistency across these studies in linking combat experiences to increased risk for PTSD. The overall association between the degree of combat exposure and PTSD was identified in the NVVRS. (Kulka, et al., 1990) as cited in Amy B. Adler, (2018). As author reports in the Millennium Cohort Study, deployed personnel who reported combat exposures had close to four times the risk of new-onset PTSD compared to those who did not report combat exposure (Smith, et al., 2008)as cited in Amy B. Adler, (2018).

Regarding the relationship between department of respondents and PTSD exposure in determination of respondents, at $p> 0.05$, chi-square value= 2.851, difference (Df) =1 and Pearson coefficient (P-value) =0.091, there was no statistical significant relationship between department and PTSD exposure with respect to respondents.

Chapter 6: Summary, Conclusion and Recommendation

6.1 Summary

Post traumatic stress disorder is psychological wound of the brain resulted from combat related war in army life. This study reviews the prevalence and experience of combat related post-traumatic stress disorder among armed force comprehensive specialized hospital. The prevalence of PTSD was 49 (57.6%) and the combat exposure experience was 33 (38.8%). This study showed a higher prevalence and experiences of PTSD than previous study of combat related in our country. With comparing international studies the result were almost equal prevalence with some countries like Kosovo, Uganda and srilanka. The combat related prevalence among male respondents, 45 (57.7%) and among female respondents, 4 (57.1%) are relatively similar while the experience of PTSD is more on male respondents, 32 (41%) than femae respondents, 1 (14.3%). With rank enlisted and educational status, lower rank and grade 8-12 educational status were more prevalence of PTSD than others categorie. With regard to the age, at age 18-29, 22 (45.8%) combat related PTSD more frequently seen.

Regarding the relationship between department of respondents and PTSD exposure in determination of respondents, at $p > 0.05$, chi-square value= 2.851, difference (Df) =1 and Pearson coefficient (P-value) =0.091, there was no statistical significant relationship between department and PTSD exposure with respect to respondents.

Regarding the relationship between combat exposure and PTSD prevalence among respondents in this study, at $p < 0.05$, chi-square value= 11.198, difference (Df) =1 and Pearson coefficient (P-value) =0.001, there was a statistical significant relationship between combat exposure experience and PTSD prevalence among respondents.

Generally, male proportion participants were more likely to report an over all PTSD and combat exposure experience history than female participants and the female population participation proportion is low in military, so the result were not better for comparison. The study investigates to what the prevalence and experience related to combat injury influence duty out comes compared to PTSD.

6.2 Conclusion

Based on the above findings and discussion of the study, the following conclusions have been reached.

The researcher screened for prevalence and experience of combat related PTSD among armed force comprehensive specialized hospital surgical and psychiatric clients who exhibit symptoms of PTSD and incorporate PCL-5 (DSM-V) post-traumatic stress disorder checklist and the researcher study with a validated PCL-5 and CES screen for the AFCSH in and out clients of surgical and psychiatry department population.

This study concluded that post traumatic stress disorder is common and highly prevalent among veterans war victims, especially military clients exposed to combat situations.The prevalence of PTSD in this sample group was 49(57.6%). This level is higher than levels reported for other international study populations of combatants. Regarding age, both prevalence and experience of PTSD was more at age of 18-29 than other age categories.

Regarding the relationship between department of respondents and PTSD exposure in determination of respondents, at $p > 0.05$, chi-square value= 2.851, difference (Df) =1 and Pearson coefficient (P-value) =0.091, there was no statistical significant relationship between department and PTSD exposure with respect to respondents. This implies that the exposure is not department based and it is the same for both departments.

Regarding the relationship between combat exposure and PTSD prevalence among respondents in this study, at p< 0.05, chi-square value= 11.198, difference (Df) =1 and Pearson coefficient (P-value) =0.001, there was a statistical significant relationship between combat exposure experience and PTSD prevalence among respondents.

To conclude, it can be said that the study revealed a clear picture of the prevalence and experience of PTSD among military related combantants by categoring the respondents in to different categories based on different comman characteristics.

6.3 Limitation of the study

The study had some limitations that should be noted when considering the results: The physical contact of the researcher with adviser and his freely movement to library and to other information areas to search for adequate material sources for this thesis work is limited due to COVID 19 spread. Due to COVID 19 spread, all combat related in the study were based on self-reported of respondents` experiences.

6.4 Recommendations

- Primary care practitioners should consider assessing for combat exposure experience then clinical consultations with combatants and refer those with positive responses to a network of health care providers,such aspsychologists and psychiatrists who are skilled in managing PTSD.
- It is suggested that Veteran services may include therapeutic and rehabilitative strategies to improve their mental health quality and PTSD be introduced into regular continuing prevention, medical education programmes for Military practitioners and aware national mental health policy to increase resource. There needs to be an introduction of awareness of the needs of combatants and a formulation of mental health policy in terms of screening and treatment programs in Ethiopia.

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Appendix-A

Addis Ababa University

College of Education and Behavioral studies

School of Psychology

Questionnaire for Armed force comprehensive specialized hospital in surgical and psychiatry department

Dear Respondent;

The objective of this study is to determine the prevalence and experience of combat-veterans Post traumatic stress disorder (PTSD) among military combatants in armed force comprehensive specialized hospital.

Therefore, you are respectfully requested to complete this questionnaire by giving appropriate responses genuinely and honestly. Be sure that the information you will provide is used only for the thesis purpose. After all, your personal rights are highly protected.

Put a check mark (×) in the box for all parts of questionnaires.

Part one: Socio-demographic information

A. Gender, 1.Male ☐ 2. Female ☐
B. Service Branch.1. Air force ☐ 2. Ground force Army ☐
C. Rank, 1. Lower rank ☐ 2.line officer ☐ 3.Higher office ☐
D. Educational status, 1. Grade 8-12 ☐ 2. Diploma ☐ 3.Degree ☐
E. Age 1. 18-29 years ☐ 2. 30-41 years ☐ 3. 42-52years ☐
F. Relationship Status 1.single ☐ 2.Married ☐
   3. Separated/Divorced/Widowed ☐
G. Signiture ☐ Date ☐

Direction:- Please use the five point scales Not at all (0), A little bit (1), Moderately (2), Quite a bit (3) and Extremely (4).

These questions are from the PCL-5, 20 items which applies to all types of stressful experiences,and CES-7 items combat experience scale.

please read each problem carefully and then select one response to indicate how much you have been bothered by that problem in the **past month**.These questions not ask respondents name and the respondents have right to not give response for the question.

Thank you for your cooperation!

Part two. PCL-5: Posttraumatic Checklist questions

No	Items	Not at all	A little bit	Moderately	Quite a bit	Extremely
1	Repeated, disturbing, and unwanted memories of the stressful experience?					
2	Repeated, disturbing dreams of a stressful experience?					
3	Suddenly acting or feeling as if a stressful experience were actually happening again (as if you were reliving it)?					
4	4. Feeling very upset when something reminded you of a stressful experience?					
5	Having strong physical reactions (e.g., heart pounding, trouble breathing, or sweating) when something reminded you of a stressful experience?					
6	Avoiding memories, thoughts,orfeelings related to the stressful experience?					
7	Avoiding external reminders of the Stress ful experience *(*for example,					

	people, places, conversations, activities, objects, or situations)?					
8	Trouble remembering important parts of a stressful experience?					
9	Having strong negative beliefs about yourself, other people, or the world*(*for example, having thoughts such as: l am bad, there is something seriously wrong with me, no one can be trusted, the world is completely dangerous)?					
10	Blaming yourself or someone else for the stressful experience or what happened after it?					
11	Having strong negative feelings such as fear, horror, anger, guilt, or shame?					
12	Loss of interest in activities that you used to enjoy?					
13	Feeling distant or cut off from other people?					
14	Trouble experiencing positive feelings *(*for example, being unable to feel happiness or have loving feelings for people close to you)?					
15	Irritable behavior, angry outbursts, or acting aggressively?					
16	Taking too many risks or doing things that could cause you harm?					

17	Being "superalert" or watchful or on guard?					
18	Feeling jumpy, or easily startled?					
19	Having difficulty concentrating?					
20	Trouble falling or staying asleep?					

Part Three. Combat Exposure Experience Scale(CEES)

1	Did you experience being in firefights or bombings?					
2	Did you witness others injured or killed?					
3	Did you kill or injure others?					
4	Were you in a difficult or dangerous situation where youfelt fearful for your life?					
5	Did you have friends that died in the war?					
6	Did you participate in or witness violence to civilians? .					
7	Did you witness human suffering?					