PREVALENCE OF POST-TRAUMATIC STRESS DISORDER AND ITS ASSOCIATED FACTORS AMONG NEPALI ARMY SERVICE MEMBERS AND VETERANS: 15 YEARS POST INSURGENCY

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ABSTRACT

Globally, mental health problems constitute a serious public health problem, contributing 14 % to the global burden of disease. The aim of this epidemiological study was to identify prevalence rates of post-traumatic stress disorder (PTSD), factors associated and its relationship with combat exposure in a post-insurgency period in Nepali army personnel and Veterans. This cross-sectional study was conducted among 300 adults in 2021. In the study both quantitative and qualitative mixed approach with descriptive design was followed. The outcome measures used in the study were locally validated with PCL-M and combat exposure scale. Of the sample, 9 % met threshold for PTSD. The association of variable in reference to age, rank, education and service years with PTSD showed that Age group and Education in current study did not show significant association. However, PTSD with years of service and rank showed significant association. The study also showed a significant relationship between combat exposure and PTSD. There is a significant association between different level of education and combat exposure as well. Overall, the prevalence rates of PTSD in the sample are comparable to other studies conducted with populations affected by conflict and with refugees. However, the findings underscore the need to address the current mental health care awareness and resources in combatants who were exposed to traumatic events during combat in insurgency period. Traumatic exposure predicted increase in PTSD.

KEYWORDS

Mental Health, Insurgency, Post Traumatic Stress Disorder, Combat Exposure, Combatants

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INTRODUCTION

Post-traumatic stress disorder (PTSD) is a complex and chronic disorder which manifest when person gets exposed to a traumatic event. It may happen when an individual experiences or perceives a life threatening or traumatic event, such as combat, a natural disaster, or a violent personal assault. It can occur at any age and to anyone, from soldiers to accident victims to rape survivors to natural disaster victims.

According to 5th edition of Diagnostic and Statistical Manual of Mental Disorder (DSM-5), PTSD is found in people who have experienced traumatic events in their day-to-day life directly and indirectly. People who have been exposed been exposed to actual or endangered death, grave injury or witnessing life threatening disease, torture, sudden unexpected death of a loved one, and military operations or sexual violence. PTSD symptoms are found to be among people who have witnessed traumatic events when compared to their counterparts. The progression of PTSD changes but symptoms can persist for years. Persistent symptoms can have prolonged neurobiological problems and comorbid states which can have effects on mental well-being. These effects can affect behavioral, psychological and physical health decreasing quality of life. PTSD can often co-occur with depression, anxiety and substance abuse which can be linked with suicidal behaviors.[1] Likewise, PTSD can have direct or an indirect affect in social relations involving close relationships such as marriage.[2] Ongoing PTSD has also been associated increased disability, decreased efficiency and productivity and limiting one's ability to serve or function.[3] The longer PTSD stays untreated, the greater the changes of health complications. Therefore, PTSD symptoms are crucial to well-being of service members, veterans and their families.[4] PTSD pertaining to combat trauma was reported for many years in military personnel and veterans. The effect of combat on PTSD in military personnel is a huge concern among the civil population, military leaders, and policy makers as it can be a debilitating consequence of severe or life-threatening trauma.[5] It causes significant distress and interferes person's social, personal, and work-related functioning. It can be resulted into long lasting effect in relation to their behavior, mood, thoughts and perception. Moreover, PTSD in military populations has an unescapable impact on military readiness and the achievement of military goals. Subsequently, recognizing the risk factors that make army personnel and veterans more likely to experience PTSD is of academic, clinical, social and institutional importance.[6] Although there have been many studies conducted regarding PTSD throughout the world, Nepal has limited studies and the resources which elucidates the prevalence of PTSD among the army personnel since the establishment of Nepali Army. Military personnel exposed to military operations are at higher chances of developing PTSD. Those at highest risk are the ones with high levels of stress, who are wounded and those imprisoned as prisoners of war, and those who manifest acute stress reactions.[7] Nepal, a country with 29 million people just overcome a 10-year long conflict situation, 1996 - 2006, costing over 15,000 lives. During insurgency, lot of killings, torture, intimidations, kidnappings, coercion against civilians, police, and public officials in more than 50 of the country's 75 districts. Many of those who died were civilians, and many were executed or 'disappeared' 3 along with an unquantifiable number of combatants killed in battles in genuine encounters. As the consequences of the conflict 100,000 to 150,000 people were internally displaced.[8]

In a study where trauma-affected populations were screened in Nepal, reported prevalence rates of PTSD ranging from 14 to 59.7%.[9] Similarly, globally reported wide prevalence PTSD (0 to 99%) in trauma-exposed populations.[10] PTSD pertaining to combat trauma was reported for many years in military personnel and veterans.

Over the years, concerns have been raised about the involvement of combatants globally in war and peace keeping operations after war as well. This civil war has led to the devastation of lives and properties as innocent civilians become victims, and in the other hand, the offenders, military also become vulnerable. According to study of nearly 9,000 samples, by King's College London, is published in the British Journal of Psychiatry which showed that PTSD in the military personnel increased from 4% in 2004-5 to 6% in 2014-16. In the veterans who were deployed in a combat role to Iraq or Afghanistan, 17% reported symptoms suggesting probable PTSD, compared to 6% deployed in support roles such as doctors and aircrew.[11] Similarly, study conducted to assess the "Factors Associated with PTSD and Depression among Nepalese Combatants during Armed Insurgency", PTSD was found in 21.9% even after six years of peace process in Nepali context.[12]

In one of the studies conducted by from Deployment Health Research Department, Naval Health Research Center, USA, in order

to study associated factors in persistent PTSD among US military personnel and veterans with baseline and follow-up (2001–2013), data was collected 12 approximately every 3 years later, those who were found to have PTSD taken as participants using the PTSD Checklist–Civilian Version at baseline (N = 2409). (N = 1132; 47%) met criteria which is almost half of the participants with persistent PTSD at the first follow-up; and 804 (71%) had PTSD symptoms at the second follow-up. Numerous factors were associated with persistent PTSD, which included high combat exposure, elder age, enlisted rank, initial higher PTSD symptoms, and depression, physical assault history, incapacitating injury/illness, and somatic symptoms. Amongst those having persistent PTSD in first follow-up, added factors of lack of sleep, retired from the military and lack of social support. Persistent PTSD symptoms were related to severe combat experiences and PTSD severity.[13]

In one of the studies conducted by Department of Psychology, University of Jos, Nigeria in Nigerian Military, Kinnasara Barracks, association of combat exposure and PTSD in military combatants in Nigeria in 249 participants including both officers and other ranks in operation showed a significant relation of combat exposure and PTSD with p-value of $P<0.05$.[14]

Several risk factors have been identified due to the PTSD. Many individuals with PTSD who receive professional treatment may still continue to suffer effects of traumatic events for a period of many years and meet criteria of PTSD for more than 15 years after the event. In Nepal, even with the history of armed insurgency for ten years no adequate explorations and this study is being done to describe the magnitude and nature of stress disorders present pertaining to combat experience.

MATERIALS AND METHODS

The main aim is to explore the PTSD prevalence and its associated factors among Nepali Army personnel and Veterans after 15 years of post-insurgency period. The study has tried to find out the PTSD prevalence and its relationship with Combat exposure scale to army personnel who were in at least battlefield. In the study both quantitative and qualitative approach were followed so, a mixed approach with descriptive design was followed. The study was conducted using mixed method. Data were acquired, analyzed and interpreted based on the subject of the study. The various aspects of the design have been described subsequently. In this research, it has also been tried to find the answers of some questions related to PTSD in Nepali army. Further, the major elements of this methodology include the use of primary and secondary data. The data were collected as an interview approach from the respondents. Besides that, various reports were collected from different sources and reviewed. The army personnel of Nepali army who were directly involved in at least one battle during armed conflict period (1996 AD to 2006 AD) between Nepal Government and Nepal Communist Party (Maoist) were considered as the universe of the study. For the study, non-probability sampling method was used and under non-probability sampling methods, convenient as well as random sampling methods was used. The sample was collected from different army units who were involved during insurgency. Ethical clearance was obtained from Research and Institutional Review Committee, Nepalese Army Institute of Health Science.

In the study PTSD, combat exposure scale and semi structured interview schedule (SSIS) was used for data collection.

Post-traumatic stress disorder Scale PTSD checklist is 17 items self-report measure of PTSD symptoms which indicates the extent to which they have been troubled by each symptom in the past month and five-point Likert 17 scale was used ranging from “Not at all” to “Extremely”. PCL have three versions, although the differences are slight. The PCL-M is a military version and questions refer to “a stressful military experience”. For general civilian version, the PCL-C is used and not linked to an exact event; the questions refer to “a stressful experience from the past”. The PCL-S is used for specific traumatic events. Participants are asked to nominate the event and it refer to “the stressful experience”. In the study PCL-M was used for data collection.

Combat Exposure Scale: The Combat Exposure Scale (CES) is a self-reported measure which has 7-item. They have a 5-point frequency (1 = “no” or “never” to 5 = “26+ times” or “51+ times”), 5-point duration (1 = “never” to 5 = “7+ months”), or 45-point degree of loss (1 = “none” to 45 = “76% or more”) scale. Based on their exposure, various combat situations, such as firing rounds at the enemy and being on dangerous duty respondents are asked to report. The score ranges from 0 to 41 which is calculated by using a sum of weighted scores, then it will be categorized into 1 of 5 categories of combat exposure extending from “light” to “heavy.” It can be easily administered and

scored which is useful in both research and clinical settings.

The scale to identify PTSD and combat exposure scale was translated in Nepali by experts and back translation was done. Questionnaire to those participants, who were unable to come, were sent through e-mails, and to those who were able to come to the Department of Psychiatry and Mental Health, Shree Birendra Hospital were called, and the questionnaire were completed. Each selected subject was initially, explained the purpose of research, assured about the confidentiality and the consent form was filled by them. Later, asked to fill SSIS to obtained demographic characteristics. Then PTSD questionnaire and Combat Exposure Scale were given to them to fill.

The data collected were initially edited, coded, entered, checked and processed. In the study exploratory data analysis techniques were used. Tabular presentation, descriptive statistics and hypothesis testing (using 5% level of Significant) were used for the quantitative data analysis. For qualitative data content analysis techniques were used memo writing as main tool.

RESULTS

The results of the study presented in various categories, starting from the general characteristics of the Nepalese combatants. Showing the association between different attributes and outcome variable follows thereafter. The data analyzed was collected from 300 respondents who were deployed during the armed insurgency period.

General characteristics of the Participants:

The participants in this study were active and retired personnel. The participants were all male. General characteristics of the participants were categories on the basis of age group, education, years of service and rank.

Regarding the age of the army personnel the majority of them were between age 34-38 years (71.00%) followed by age between 39 to 43 years (18.00%), age between 44 to 48 years (8.67%) respectively.

All the participants were literate. Among them, most of the combats had completed up to class ten 40% up to SLC, 30% up to Intermediate, under SLC 20.67%, 8% were educated up to Bachelor level and 1% Masters.

Based on the years of service, 70.67% of participants serving in Nepali army between 15 to 19 years followed by (20%), 20-24 years, 25-29 years about (6%) and server for 30 or more 0.67%. Among the total participant (n=300) 2.67% were retired officers.

According to the rank, (56.33%) were from other rank, (29%) were of officers and junior commision officers (JCO) were of 14.67%.

Table 1: Demographic characteristics of participants (n=300)

Title	n	%
Age Group (Years)		
34 to 38 years	213	71.00
39 to 43 Years	54	18.00
44 to 48 Years	26	8.67
49 to 53 Years	6	2.00
54 and above Years	1	0.33
Education		
Masters	3	1.00
Bachelor	24	8.00
Intermediate	91	30.33
SLC	120	40.00
Under SLC	62	20.67
Years of Service		
15 to 19 years	212	70.67
20 to 24 years	60	20.00
25 to 29 years	18	6.00
30 and more	2	0.67
Retired	8	2.67
Rank		
JCO	44	14.67
Officer	87	29.00
Other	169	56.33

Table 2: Prevalence of PTSD

PTSD	Yes n (%)	No n (%)
Percent	27 (9)	273 (91)

In the study 50 cutting cumulative scale is use for identifying the Post-Traumatic Stress Disorder. Figure below shows the PTSD among the participants:

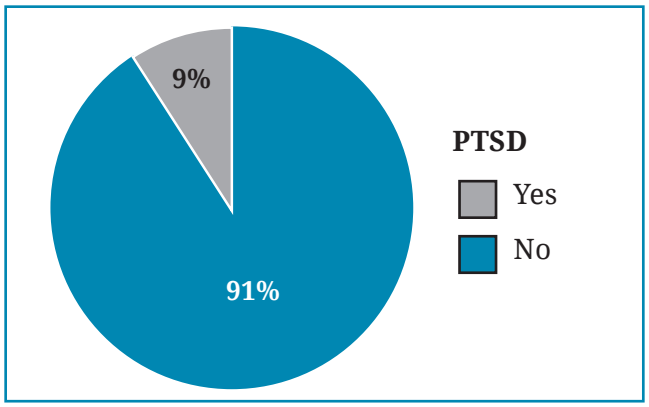

Fig. 2: Prevalence of PTSD

Among the participants, only 9% (27 Participants) are in PTSD but the majority of participants 91% (273 participants) does not have PTSD.

Distribution of PTSD score on the basis of age group, education, years of service and rank (Table 3).

Table 3 represents number of participants having PTSD and no PTSD in terms of age, education, service year and rank.

According to the study, of total PTSD respondents (n-27), 6.33% of the total combats fall underage group of 34-38 years followed by 1.33% from

Table 3: PTSD on the basis of age, education, years of service and rank (n=300)

Age group (years)	No PTSD (%)	PTSD (%)	Total (%)
34 to 38	194 (64.67)	19 (6.33)	213 (71.00)
39 to 43	50 (16.67)	4 (1.33)	54 (18.00)
44 to 48	24 (8.00)	2 (0.67)	26 (8.67)
49 to 53	5 (1.67)	1 (0.33)	6 (2.00)
54 and above	0 (0.00)	1 (0.33)	1 (0.33)
Grand Total	273 (91.00)	27 (9.00)	300 (100.00)
Education			
Masters	2 (0.67)	1 (0.33)	3 (1.00)
Bachelors	22 (7.33)	2 (0.67)	24 (8.00)
Intermediate	80 (26.67)	11 (3.67)	91 (30.33)
SLC	113 (37.67)	7 (2.33)	120 (40.00)
Under SLC	56 (18.67)	6 (2.00)	62 (20.67)
Grand Total	273 (91.00)	27 (9.00)	300 (100.00)
Years of service			
15 to 19	195 (65.00)	17 (5.67)	212 (70.67)
20 to 24	54 (18.00)	6 (2.00)	60 (20.00)
25 to 29	18 (6.00)	0 (0.00)	18 (6.00)
30 and more	2 (0.67)	0 (0.00)	2 (0.67)
Retired	4 (1.33)	4 (1.33)	8 (2.67)
Grand Total	273 (91.00)	27 (9.00)	300 (100.00)
Rank			
JCO	40 (13.33)	4 (1.33)	44 (14.67)
Officer	76 (25.33)	11 (3.67)	87 (29.00)
Other	157 (52.33)	12 (4.00)	169 (56.33)
Grand Total	273 (91.00)	27 (9.00)	300 (100.00)

39-43 years, 0.67% 44-48% and 0.33% from 49-53 years and above. In respect to the education, 3.67% were of Intermediate level, 2.33% of combat were up to SLC followed by 2% below SLC, 0.67% from bachelor's degree and 0.33% from Masters. Similarly, according to the rank of total PTSD (n=27), 3.67% were of Officers, followed by other rank 4% and 1.33% from JCO. According to the years of services, 5.67% had service years for 15-19 years, 2% had 20-24 years of service and retired were of 1.33%.

Chi-square test of PTSD and age group, education, years of service and rank (Table 4).

Table 4 shows the association between the variable in reference to age, education and service years among the combats having PTSD. Chi-square value of PTSD and Age group in current study is 5.695 with p-value of 0.127 showing no association between PTSD and age group of participants. Similarly, Chi-square value of PTSD and education level of participants is 1.799 with p-value of 0.615 demonstrating no association between PTSD and Education. However, Chi-square value between PTSD and years of service is 21.575 with p-value of 0.00 indicating significant association between PTSD and years of service. The Chi-square value between PTSD and rank of army personnel is 44.184 with p-value of 0.01 indicating significant association between PTSD and rank which means rank of staff also affects the PTSD.

Table 4: Chi-square test of PTSD , age group, education, years of service and rank

PTSD with	Chi-square value	Degree of freedom	P-value
Age group	5.695	3	0.127
Education	1.799	3	0.615
Years of Service	21.575	4	0.00
Rank	44.184	19	0.01

Combat exposure scale status (Table 5).

The result listed below shows the different degree of combat exposure categories according to combat exposure scale, ranging from light to severe in total participant (n=300). Majority of combatants were exposed to light (51%), light to moderate (33%), moderate degree (11.33%) moderate to heavy (2.67%) and heavy (2%).

Table 5: Combat exposure scale status

CES categories	n	%
Light	153	51
Light-moderate	99	33.00
Moderate	34	11.33
Moderate-heavy	8	2.67
Heavy	6	2.00
Grand Total	300	100.00

Relationship between Post Traumatic Stress Disorder and Combat Exposure Scale (Table 6).

Table 6 represents the total percentage of categories of combat exposure in respect to the participant having PTSD and not having PTSD. According to the data, total no of combatants having PTSD were 27 (n=27), among which 11 (3.67%) of them had light-moderate level of exposure, 7 (2.33%) were exposed to light and moderate level of exposure and 1(0.33%) were exposed to heavy and moderate-heavy exposure respectively.

Table 6: PTSD and combat exposure scale.

Categories	No PTSD (%)	PTSD (%)	Total (%)
Light	146 (48.67)	7 (2.33)	153 (51.00)
Light-moderate	88 (29.33)	11 (3.67)	99 (33.00)
Moderate	27 (9.00)	7 (2.33)	34 (11.33)
Moderate-heavy	7 (2.33)	1 (0.33)	8 (2.67)
Heavy	5 (1.67)	1 (0.33)	6 (2.00)
Grand Total	**273 (91.00)**	**27 (9.00)**	**300 (100.00)**

Correlation between PTSD and combat exposure scale (Table 7).

The correlation between PTSD and combat exposure is 0.302 with p-value of 0.00 which indicates that there is significant relationship between combat exposure and PTSD.

Table 7 : Correlation between PTSD and combat exposure scale

Correlation value	P-value	Result
0.302	0.00	Significant relation

Table 8: Combat exposure scale based on education, age, years of service and rank						
Title	**Light (%)**	**Light -moderate (%)**	**Moderate (%)**	**Moderate-heavy (%)**	**Heavy (%)**	**Total (%)**
Education						
Master	1 (0.33)	1 (0.33)	1 (0.33)	0 (0.00)	0 (0.00)	3 (1.00)
Bachelors	13 (4.33)	4 (1.33)	4 (1.33)	0 (0.00)	3 (1.00)	24 (8.00)
Intermediate	49 (16.33)	28 (9.33)	7 (2.33)	5 (1.67)	2 (0.67)	91 (30.33)
SLC	65 (21.67)	39 (13.00)	15 (5.00)	0 (0.00)	1 (0.33)	120 (40.00)
Under SLC	25 (8.33)	27 (9.00)	7 (2.33)	3 (1.00)	0 (0.00)	62 (20.67)
Age groups (years)						
34 to 38	117 (39.00)	70 (23.33)	20 (6.67)	4 (1.33)	2 (0.67)	213 (71.00)
39 to 43	28 (9.33)	18 (6.00)	5 (1.67)	2 (0.67)	1 (0.33)	54 (18.00)
44 to 48	7 (2.33)	9 (3.00)	6 (2.00)	2 (0.67)	2 (0.67)	26 (8.67)
49 to 53	1 (0.33)	2 (0.67)	2 (0.67)	0 (0.00)	1 (0.33)	6 (2.00)
54 and above	0 (0.00)	0 (0.00)	1 (0.33)	0 (0.00)	0 (0.00)	1 (0.33)
Grand Total	153 (51.00)	99 (33.00)	34 (11.33)	8 (2.67)	6 (2.00)	300 (100.00)
Years of service						
15 to 19	120 (40.00)	68 (22.67)	18 (6.00)	4 (1.33)	2 (0.67)	212 (70.67)
20 to 24	27 (9.00)	21 (7.00)	9 (3.00)	2 (0.67)	1 (0.33)	60 (20.00)
25 to 29	5 (1.67)	8 (2.67)	3 (1.00)	1 (0.33)	1 (0.33)	18 (6.00)
30 and more	1 (0.33)	1 (0.33)	0 (0.00)	0 (0.00)	0 (0.00)	2 (0.67)
Retired	0 (0.00)	1 (0.33)	4 (1.33)	1 (0.33)	2 (0.67)	8 (2.67)
Grand Total	153 (51.00)	99 (33.00)	34 (11.33)	8 (2.67)	6 (2.00)	300 (100.00)
Ranks						
JCO	11 (3.67)	20 (6.67)	10 (3.33)	2 (0.67)	1 (0.33)	44 (14.67)
Officer	51 (17.00)	23 (7.67)	9 (3.00)	0 (0.00)	4 (1.33)	87 (29.00)
Other	91 (30.33)	56 (18.67)	15 (5.00)	6 (2.00)	1 (0.33)	169 (56.33)
Grand Total	153 (51.00)	99 (33.00)	34 (11.33)	8 (2.67)	6 (2.00)	300 (100.00)

Distribution of combat exposure scale on the basis of education, age, years of service and rank

Table below shows the distribution of age, education, years of service and rank among the total participants (n=300). In total, 153 of them have light combat exposure of which, majority (21.67%) of them were educated up to SLC followed by Intermediate (16.33%), under SLC up to (12.67%), Bachelor (4.33%) and Masters (1.33%). Among the participants having light-moderate combat exposure (n=99), 14.67% of participants were educated up to SLC followed by under SLC level (12.67%). Among the

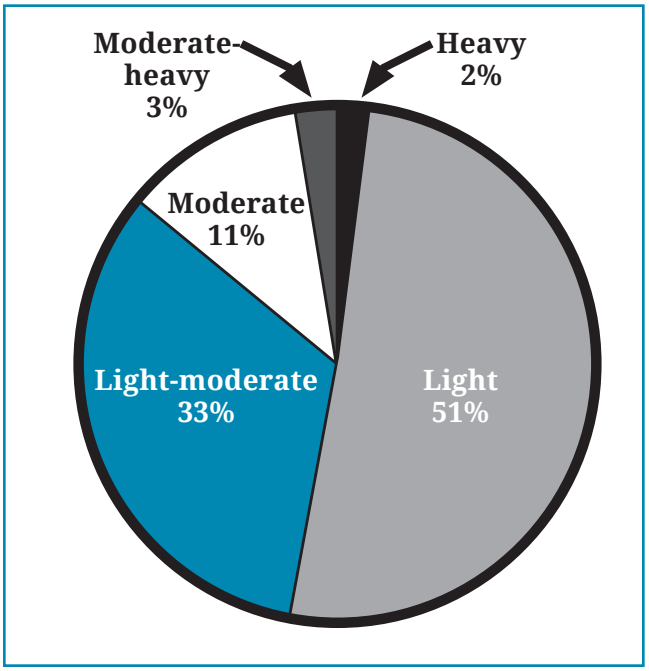

Fig. 2: Degree of combat exposure categories according to combat exposure scale

participants having moderate level of combat exposure (n=34), most of them (5.00%) were educated up to SLC followed by Intermediate, Bachelor, Under SLC and Masters. Among moderate-heavy level of combat exposure (n=8), (1.67%) were educated up to Intermediate level and (1.00%) were educated under SLC level. Among the participants exposed to heavy combat exposure (n=6), (0.67%) were educated up to Bachelor, Intermediate and SLC. The Chi-Square value is 32.464 (df=12) and p-value is 0.001 which is less than 0.05 so there is a significant association between different level of education and combat exposure.

Similarly, highest no of respondents with combat exposure falls under 34-38 years of age (n=213). Most of the participants currently has service years of 15-19 years. In total (n=300), (2.67%) were retired army personnel. Similarly, according to the rank, highest no of participants with combats exposure falls under rank of officer (56.33%).

DISCUSSION

Present study aims to explore the PTSD prevalence and its associated factors among Nepali army personnel and veterans after 15 years of post-insurgency period. In the study PTSD was based on validated standardized tool PCL-M with the cut off scale of greater or equal to 50. It was found that only 9% fulfill the criteria of PTSD which is less than study of Rawal *et al* (2018)[12] where 21.9% of PTSD was found, in mid 1990s which was conducted after 6 years of post- insurgency. Similar differences of PTSD was found in the study conducted among US military personnel and veterans with baseline and follow-up (2001-2013) where data was collected approximately every 3 years later, were found to have PTSD though the percentage varies.[13] In one of the main studies of 60,000 Iraq and Afghanistan veterans, it was found that 13.5% of deployed and non-deployed veterans had PTSD.[14] One of the reasons behind lower PTSD is the time factor because study was conducted 8 years later than Rawal *et al's* study[12] and there is lot of time gap between post insurgency period and present time.

Present study has not showed the association between PTSD and age group as well as education of respondents which was the same in a study of Rawal *et al.*[12] However, there was significant association between PTSD and years of service, shown by Chi-Square value of 21.575 with p-value of 0.00 between PTSD and years of service (i.e., significant) which supports the findings of Rawal *et al.*[12] Similarly, there was also association between the rank and PTSD with the Chi-Square value of 44.184 with p-value of 0.01 showing rank affect the PTSD. It could be due to the experience, their coping mechanism, environmental factors, lifestyle, family support and many more.

Relationship between PTSD and combat exposure scale.

According to the present study (n=300), total no of combats having PTSD were 27 (n=27), among which 11 (3.67%) of them had Light-Moderate level of exposure, 7 (2.33%) of them were exposed to light and moderate level of exposure and 1 (0.33%) were exposed to heavy and moderate-heavy exposure respectively. The correlation between PTSD and Combat Exposure is 0.302 with p-value of 0.00 which indicates that there is significant relationship between Combat Exposure and PTSD. Higher the exposure to trauma, the higher will be the PTSD which also supports the results obtained by the study conducted among the US veterans between 2001-2013 in three years of intervals with the same sample in relation to factors associated with persistent PTSD among US military service members and veterans, where they found PTSD being persistent to those who have highest combat exposure. As the time passes, PTSD prevalence also changes or varies.[13] It was also similar with the findings among Nigerian Military where association of combat exposure and PTSD has significant relation with p-value of $P<0.05$.[14]

The most noticeable risk factors for persistent PTSD were combat experiences and PTSD severity. Comorbid conditions like injury/ illness, somatic symptoms, lack of family support during insurgency period to overcome their problems and lack of financial support played a pivotal role in maintaining PTSD which should be addressed timely. The high percentage of participants with PTSD supports the need for more comprehensive and accessible management, especially after retirement from the army. After ending the armed conflict in 2006 the country opens the door for economic growth and development. During the armed conflict many people either from security forces, civilians and 31 members of CPN-M party lost their lives. Many people are injured, and some people suffered from mental illness. The study conducted in 2012 in Nepal to measure the PTSD among the army personnel to find out PTSD and depression level where (21.9%) of army personnel were involved in army conflict meet the criteria of PTSD.[12] Similarly, present study also shows (9%) in total (n=300) of people with PTSD as of now 15 years of insurgency indicating it remains persistent in some cases due to several factors like age, education, service years, retirement and mainly number of times of exposure to combat. Results and findings from this study mainly indicate that the intensity of combat exposure during the insurgency period in Nepal is a strong risk factors of PTSD regardless of other attributes like age, rank, service year. This finding is consistent with other research too that suggests combat exposure, compared with other types of traumas, confers a uniquely high risk of persistent PTSD, with strong linear associations related to combat intensity.

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