LUPINE PUBLISHERS

Current Trends on Biostatistics & Biometrics

DOI: 10.32474/CTBB.2019.01.000120

ISSN: 2644-1381

Research Article

Life Losses and Gains in British Korean War Veterans: The Late Life Legacy

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Received: June 11, 2019 **Published:** June 23, 2019

Abstract

In 2001, a survey of the veteran members of the British Korean War Veterans Association was conducted with support from the Royal British Legion. As a part of this survey, the present inquiry addresses the relationship between older combatant and non-combatant veterans' levels of combat exposure, their losses and Gains in life and current psychological symptoms. Nine hundred and ninety-four British Korean War veterans provided data for four measurement scales: The Combat Exposure Scale (CES); the Losses from life scale and the Gains from life scale, and the Impact of Event Scale (IES). Significant positive correlation effects were found between life losses (but not life gains) with and between the CES and the IES. Combatants had an overall score on the IES that clearly exceeded its recommended cut-off level but notably the score for non-combatants was just approaching the cut-off, indicating that some of them were also experiencing psychological symptoms just from being in the war zone. Although it is now some 65 years since the cessation of fighting in 1954, the findings seem to suggest that their life losses are not positively influenced by their life gains, rather they appear to co-exist.

Keywords: Korean War; veterans; losses and gains; combat exposure; psychological symptoms

Introduction

Hickey (1999) states that the Korean War (KW) of 1950-54 was the first serious conflict of the Cold War and a major test of the United Nations with troops sent from 16 countries [1]. Some 100,000 personnel from the United Kingdom (UK) served in the Korean War. Two-thirds of the land-based troops were National Service men and Reservists (mandatorily recalled civilians having served in World War II [WWII]) and the remainder were Regular soldiers. Over the war's course, there were periods of both fierce fighting and tense stalemate, conducted in an inhospitable terrain with a harsh climate of permafrost in winter and high temperatures in summer. Some 1,106 British troops were killed in action, more were injured, and 1060 were taken prisoner or were missing. Aside from military action, many witnessed the plight of large numbers of Korean refugees who had fled from North to South ahead of the advancing communist North Koreans backed by China [1].

Review of the Literature

Military service is regarded as exerting an important influence upon veterans' lives [2] yet the potential for adverse effects from combat exposure has been described as a 'hidden variable' in the lives of older men [3]. These effects can lie dormant for decades, only to re-emerge later in response to other adverse changes in roles, relationships, and mental and physical health [4,5]. Much of war-based literature focusses upon adversity and/or human vulnerability as outcomes from participation in warfare and in general, combatants are shown to be those most prone to post war anxiety, depression and Post Traumatic Stress Disorder (PTSD) [3,6,7]. Participation in warfare can have positive as well as negative effects [3,7,8]. These have been referred to as: losses and gains [7], or post-traumatic or stress-related growth or benefit [3,9]. Reasons why some people show benefit from a stressful experience while others become debilitated by it has been studied through measurement of personal attributes such as: perceived optimism and pessimism [10]; locus of control [11]; self-esteem and self-efficacy [12], and increased resilience [7,13]. In a longitudinal study of college students that used a pre-tested measurement scale, stress–related growth was associated with the level of religious belief; positive coping strategies; the number of recent positive life events, and social support satisfaction [14].

Several studies have shown that combat exposure and other adverse experiences can lead to negative psychosomatic outcomes for veterans such as PTSD, that may be short term or long term [15-17] and may continue into late life [7,18]. Increasingly the complex study of the impact of war-service upon the lives of participants includes consideration of childhood and family histories [19]; pre, during and post deployment war factors [20], and other intervening life events [21]. The role of post war social support [22] and the effects of the quality of the homecoming experience in terms of unmet expectations are also believed to be influential factors in post war mental health [23] and include not only the home-based family's support but also that from the workplace [24]. A further consideration for this enquiry is to contribute to fleshing out the knowledge of the long-term effects on UK KW veterans as a distinct cohort. For, researchers have often placed KW veterans in mixed samples with those of WWII on the basis that both Wars' veterans are in their 'late life'. Although some research shows similarity of responses between veterans of different wars, it can be argued that there is sufficient evidence for the KW veterans to stand alone. For example, when veterans of the KW, the Vietnam War (VW) and WWII were compared, although the severity of psychiatric symptoms was primarily related to severity of combat experience and independent of the theatre of war, the frequency with which the symptoms appeared differed between the wars' cohorts [15]. Furthermore, in other research by McCranie and Hyer (2000) comparing the severity of PTSD symptoms in KW and WWII veterans, they found that the KW cohort had more pronounced symptoms, even after controlling for confounding variables such as age and different levels of combat exposure [25].

In general, returning US KW veterans were welcomed back home but as UK society was still war-weary from WWII, there was little interest in this far away war or its veterans. UK media reporting was low, particularly for returning troops who were often treated with indifference [26]. For this reason, it is often reported as 'The Forgotten War' and anecdotally its 'forgotten' veterans believe themselves to be 'different' from other wars' veterans. Now well into their third age, US research with WWII and KW US veteran participants [27] shows that older combatant veterans with PTSD are associated with increased morbidity. Ikin et al. [28] similarly found an association between combatant war service, anxiety, post-traumatic stress disorder (PTSD) and depression in 7525 surviving Australian male KW veterans in comparison with a community group. In terms of life gains and losses, other authors suggest that traumatic stress poses both risks and benefits but the positive benefits from military experiences can counter the negative sense of loss that is seen to accompany combatants [8].

Combatants (unsurprisingly) are shown to be those most prone to post war anxiety, depression and PTSD [3,7]. However, whilst there is plenty of evidence supporting the argument that heavy exposure to combat is a strong predictor of psychiatric symptoms, what is less clear is if simple exposure to a war zone can in some circumstances also be stressful. Relatively little attention has been paid to the distinction between the setting where combat takes place and the combat activities themselves. Accounts of the KW certainly indicate that even for non-combatants, conditions could be very stressful indeed. For example, there was the constant apprehension even after the war entered its 'standoff' phase that a counter-surge might be imminent. Given the extremely labile conditions of the first stage of the war, this was a reasonable paranoia and not helped by UK troops reportedly not being adequately clothed to protect them from cold injuries in the sub-zero winter climate in the early part of the War [29].

Methodology

Sample Selection and Method

The UK KW veteran participants were recruited opportunistically through the British Korean Veteran Association. A preliminary article to explain the intended survey was published in the members' magazine. In the subsequent issue, the questionnaires, completion instructions, and pre-paid return envelopes to the researchers were inserted in 4000 magazines with a request for anonymous completed returns to the researcher within a four-week period.

Materials and content

The questionnaire sought to establish personal and military characteristics including: age; marital status: type and length of service, rank, where service took place, role in warfare and duties; receipt of war pension if applicable; a health checklist, and current levels of social and health care support. The intensity of war experiences was measured using an adapted version of the Combat Exposure Scale (CES) [30] with 9 ordinal items with values of 1 no exposure through to 6. heavy exposure. The intensity of losses and gains from war-time experiences in post war life was measured by the 14 item losses scale (LS) and 14 item gains scale (GS) [7]. Each item had the ordinal values of 1. Not at all through to 4. A lot [7]. The final measure, the Impact of vent Scale (IES) [31] determined levels of intrusion and exclusion of thought arising from the respondent's experiences of the KW and had 15 items with the ordinal values of 1. not at all through to 4. a lot.

The key objectives for the inquiry

For the purpose of this article, the following three objectives were set to guide the analysis:

A. To observe and compare the veterans' levels of subscription to individual items in the life losses and gains scales.

B. To identify the significance of correlations effects between the KW veterans' levels for combat exposure, their life Losses and Gains, and presence of psychological symptoms in the Impact of Event Scale.

C. To establish the significance of differences between the combatants with non-combatants using t test on the same four scales as above in ii].

Results

Return Rate and Data Management

The postal survey, conducted in 2001, resulted in 1009 returned questionnaires of which 15 were so poorly completed that they were discarded as unreliable. Of the remaining 994 returned questionnaires attention was drawn to the high number of missing values predominantly in the psychology-based scales (the IES and CES). For example, 76 veterans had missing values in the completion of the CES and 116 in the IES (missing could be due to non-completion of a whole scale's items or more frequently non completion of scale's single or multiple items). In contrast in other dichotomous more factual questions such as combat status, there were in general only 20 or fewer missing values. Reasons for this are suggested later in the conclusions. The above anomalies required a pragmatic approach to reduce complexity whilst facilitating reliable statistical outputs. Hence, the scales' data were standardized to n=994 before statistical comparisons were made, using the SPSS facility for computer-generated missing data replacement. It is of note that there were minimal differences in a pre-test using the same tests (correlation and t test) between the outputs from the original data with those manipulated to replace missing data and no difference was found in their respective levels of statistical significance.

Sample Characteristics

The 994 participating veterans represented some 1 in 4 of the total BKVA membership. Of these, their mean age in Korea was 22 years and at the time of the survey their mean age was 70. Most were: in the army; land-based; male; undertaking National Service and of other ranks. Of the 994 participants, 504 were combatants and 490 were non-combatants.

Veterans Subscription to Life Losses and Gains Scales' Items

The responses to the 14 items in each of the two scales for losses and for gains, respectively, were reviewed to identify items that were the most frequently subscribed to or of other comparative interest between the two groups (combatants and non-combatants). In work by Aldwin et al. [3], these positive and negative life span appraisals have been related to the diagnosis of veterans with PTSD symptoms in later life. The mean scores are given for combatants and non-combatants in Table 1 for losses and in Table 2 for gains. As shown in Table 1, combatants' mean scores for losses items were consistently higher than those for non-combatants. The most marked differences where combatants had notably higher mean scores than non-combatants were in the following 7 numbered items: Disrupted my life [2]; Memories of misery/discomfort [4]; Combat anxieties/apprehensions [7]; Death of friends [9]; Bad memories/nightmares [10] ; loss of my good health [11] and Memories death/ destruction [13].

Table 1: Mean values for life losses by combat status.

Items	Combatants	Non-combatants
1. Separation from loved ones	2.76	2.67
2. Disrupted my life	2.40	2.04
3. Delayed my career	1.92	1.75
4. Memories of misery/ discomfort	2.71	2.38
5. Waste of time/ bored	1.68	1.49
6. Financial problems for me or my wife	1.71	1.57
7. Combat anxieties/ apprehensions	2.35	1.86
8. Lonely for wife/ family	2.28	2.15
9. Death of friends	2.89	2.32
10. Bad memories/ nightmares	2.43	1.82
11. Loss of my good health	2.28	1.93
12. Caused drink problems	1.37	1.24
13. Memories of death/ destruction	2.68	2.15
14. Damaged my close/marital relationship	1.42	1.23

Table 2: Mean values for life gains by combat status.

Items	Combatants	Non-combatants
1. Learned co-operation/teamwork	3.40	3.36
2. Gained a broader perspective on life.	3.38	3.45
3. Felt proud to be British.	3.53	3.56
4. Gained an appreciation of peace.	3.34	3.28
5. Learned to cope with adversity.	3.36	3.30
6. Found greater self-respect.	3.27	3.25
7. Gained positive feelings about myself.	3.00	2.97
8. Gained rewarding memories.	3.17	3.28
9. Learned to value life more.	3.60	3.45
10. Gained a clearer purpose in life.	2.90	2.88
11. Improved opportunity through education.	2.21	2.24
12. Became more independent.	3.28	3.25
13. Made life-long friends.	3.06	2.97
14. Gained better job skills and options.	2.14	2.35

In contrast, as shown in Table 2, the mean scores for life gains items for both combatants and non-combatants were higher than those for losses and the differences between the two groups' sets of mean scores were much smaller than those for Losses. This suggests that both groups perceived that the KW contributed more gains to

life than losses. Non-combatants had notably higher mean scores than combatants for the following gains numbered items: gained a greater perspective on life [2]; gained rewarding memories [8]; gained better job skills and options [14]. Conversely, combatant gains at a notably higher level than non-combatants comprised only one item: Learned to value life more [9].

Correlation Effects

The second stage of the analysis sought to determine the correlation effects between losses and gains mean scores with and between those of the CES and IES. The correlation matrix is shown as Table 3. There were no significant correlation effects between the gains score with that of the CES, the IES, or losses. However, significant positive correlation effects are shown for the losses score with the CES ($p<0.01$) and the IES scores ($p<0.01$), respectively. The observed positive effects indicate that veterans with higher scores on losses from life were significantly associated with higher scores on the CES (indicative of higher combat exposure) and on the IES (indicative of higher levels of intrusion and avoidance of thought).

Table 3: Correlation effects for Losses and Gains Scores with IES and CES scores (n=994). *Correlation is significant at the 0.01 level (2 tailed).

Test Variables	Test	Gains	Losses	CES	IES
Gains	Pearson Correlation		.042	.056	.047
	Sig. (2-tailed)		.188	.077	.142
	N	994	994	994	994
Losses	Pearson Correlation	.042		.359	.617
	Sig. (2-tailed)	.188		.000*	.000*
	N	994	994	994	994
CES	Pearson Correlation	.056	.359		.411
	Sig. (2-tailed)	.077	.000*		.000*
	N	994	994	994	994
IES	Pearson Correlation	.047	.617	.411	
	Sig. (2-tailed)	.142	.000*	.000*	
	N	994	994	994	994

Independent t-test

To identify the significance of the difference between combatants' and non-combatants' scores on each of the four scales, first the group means were reviewed, as shown in Table 4. The mean scores for life gains were similar between the two groups but as expected the means for life losses were higher for combatants than non-combatants. It is of note, that the IES cut off score for the presence of psychological symptoms is set at 26 and above and whereas combatants clearly exceeded this with a mean score of 30.98, non-combatants were nearly approaching the cut off with a score of 25.39. This suggests that as some non-combatants must have had scores above the cut-off, just being under the combat zone's conditions appears to have been sufficient to produce psychological symptoms later in life in them too. When independent t-tests were undertaken, the difference between the combatant and non-combatant groups' respective mean scores was significant for life losses ($t=6.706$, $df=918.93$, $p<0.01$), but not for life gains ($p>0.05$). Furthermore, the differences between these two groups' scores were significant for the CES ($t=24.73$, $df=921.89$, $p<0.01$) and the IES ($t=8.27$, $df=878\ 52$, $p<0.01$), respectively. Thus, combatants were more likely than non-combatants to have had greater exposure to combat, higher levels of losses from life and to be experiencing psychological symptoms stemming from their KW war service.

Table 4: Group statistics for Losses and Gains: Combatants and non-combatants mean scores.

	Combat status	Mean	Std. Deviation	Std. Error Mean
Gains	Combatant	46.71	8.364	.394
	Non-combatant	46.54	8.538	.374
Losses	Combatant	34.50	10.305	.486
	Non-combatant	30.22	9.445	.414
CES	Combatant	28.78	8.242	.389
	Non-combatant	16.12	7.611	.334
IES	Combatant	30.98	11.323	.534
	Non-combatant	25.39	9.469	.415

Limitations

The article provides findings based on a large participant sample of British KW veterans. Arguably as a community–based sample, it avoids some of the bias problems that may arise when sample-selection is based upon veterans as patients already presenting with clinical levels of a psychiatric disorder. Furthermore, it is recognized that at this distance in time from the KW, asking for retrospective judgements from the participants may involve bias through exaggeration or diminish memory. However, other authors in a comparative study of US military men's present appraisals of World War II with those recorded after it, found that the former significantly predicted the latter [32]. A further issue concerns the representativeness of the participant sample. In this, it is possible that by only attracting responses from a quarter of the target KW veterans, there could be bias towards those with an 'an axe to grind' but there was no evidence suggesting this form of bias in the comments. Indeed. the poor level of completion of psychological scales would suggest that the survey could have underestimated rather than overestimated the extent of the psychological problems being experienced by the KW veterans and some receiving the questionnaire may have been too distressed to complete it.

Discussion

Although life gains from wartime experiences were perceived mostly at similar and higher levels than life losses by combatants and non-combatants, there were differences in emphasis in individual items. Non-combatants tended to perceive their war experiences as having offered opportunity to gain education and skills, whereas combatants perceived their life gains as growth in personal resilience and valuing life, both probably because of surviving the war. Losses on the other hand for combatants reflected the miseries of warfare in terms of death and destruction. There is no evidence to suggest combatants heightened level of current psychological symptoms have been positively influenced by their life gains, as suggested by other authors [8]. Rather, their life losses and gains seem to co-exist without interaction. (Reasons for this will be made clearer when the qualitative interview data is published later.

A sizeable number of KW veterans living in the community were found to have psychological symptoms that must (at the least be marring) their quality of life. However, what is of interest is that, psychological distress has arisen in non-combatants as well as combatants just from being in the war zone and being exposed to the extremes of the climate, appalling living conditions and loss of friends. Although some overall similarity between these present findings with earlier studies of mixed KW with WW11 veteran samples [2, 3-5], it also supports the case for KW veterans to be studied as a stand-alone sample, if such subtle differences are to be clearly identified.

The emergence of PTSD symptoms in older veterans has been noted in the US literature for some years [32] particularly when in tandem with the onset of age-related morbidities or exposure to traumatic news events triggering dormant trauma-induced syndromes [33]. From a UK perspective, in a mixed veteran sample (WWII with KW veterans), Hunt and Robbins, (2001) found that almost a fifth of the sample scored above the threshold on completion of the General Health Questionnaire and the IES [34]. Their results collectively indicate the presence of traumatic long-term effects of combat exposure in older KW veterans. However, without clinical diagnoses, PTSD could not be confirmed, as is the case with the present study. Similarly, the interesting question posed by Spiro et al (1991) as to whether PTSD in older veterans occurring after their exposure to combat is following the true course of the disorder or is it a consequence of a failure to recognize and treat the disorder [35], also cannot be addressed by the present study. However, the findings reinforce the view that although combat exposure in the KW is particularly associated with long-term psychological distress in later life, the non-combatant's exposure to the conditions of the warzone alone also seems to produce adverse effects long after the event.

Finally, the apparent reluctance of a high number of these veterans to fully complete psychology-orientated scales perhaps uncovers a long-standing cultural dislike of inquiry that touches on war-related mental functioning. Furthermore, they may not wish to disclose or discuss their past or present psychological health and despite the potential benefits of doing so. Therefore, medical and para-medical personnel may fail to attach importance to the long-term effects of participation in the KW when undertaking older veterans' histories and assessments.

Conclusion and Recommendations

In meeting the three objectives for this article, the use of life losses and gains scales in conjunction with the CES and IES is an efficient way of gaining insight into the extent and nature of the KW's life-span effects and the differences between combatants' with non-combatants' perspectives. As participation in combat was not the sole causal agent of psychological distress in this participant sample, it is recommended that greater attention should be given to the non-combat conditions of a warzone as well as those of combat. Further research is needed to establish whether this phenomenon is peculiar to the KW (thus adding credence to its veterans' belief that they are indeed 'different from other wars' veterans) or to veterans of all wars.

References

1. Hickey M (1999) The Korean War: The West Confronts Communism. London, John Murray.
2. Spiro III A, Schnurr PP, Aldwin CM (1997) A life-span perspective on the effects of military service. Journal of Geriatric Psychiatry 30: 91-124.

3. Aldwin CM, Levenson MR, Spiro A 3rd (1994) Vulnerability and resilience to combat exposure: Can stress have lifelong effects? Psychology and Aging 9(1): 34-44.

4. Davison EH, Pless AP, Gugliucci MR, King L A, King DW, et al. (2006) Late-life emergence of early-life trauma: The phenomenon of late-onset stress symptomatology among aging combat veterans. Research on Aging 28(1): 84-114.

5. Davison EH, Pless Kaiser A, Spiro A III, Moye J, King LA, et al. (2015) From late-onset stress symptomatology to later-adulthood trasuma reengagement in aging combat veterans: Taking a broader view. The Gerontologist 56(1): 14-21.

6. Sledge WH, Boydstun JA, Rabe AJ (1980) Self-concept changes related to war captivity. Archives of General Psychiatry 37(4): 430-443.

7. Elder G, Clipp E (1989) Combat experience and emotional health: Impairment and resilience in later life. Journal of Personality 57(2): 311-341.

8. Jennings PS, Aldwin C, Spiro III A, Mroczek DK (2006) Combat Exposure and Wisdom. Research on Aging 28(1): 115-134.

9. Tedeschi RG, Calhoun LG (1996) The post traumatic growth inventory: Measuring the positive legacy of trauma. Journal of Traumatic Stress 9(3): 455-471

10. Marshall GN, Lang EL (1990) Optimism, self-mastery, and symptoms of depression in women professionals. Journal of Personality and Social Psychology 59(1): 132-139.

11. Rotter JB (1966) Generalized expectancies for internal versus external control of reinforcement. Psychological Monographs 80(1): 1-28

12. Solomon Z, Benbenishty R, Mikulincer M (1991) The contribution of wartime, pre-war, and post-war factors to self-efficacy: A longitudinal study of combat stress reaction. Journal of Traumatic Stress 4(3): 345-361

13. Elder GH, Clipp EC (1988) Combat experience, comradeship, and psychological health. In JP Wilson, Z Harel, B Kahana (Eds.) Human adaptation to extreme stress: From the Holocaust to Vietnam. New York: Plenum Press, pp. 131-156.

14. Park Cl, Cohen LH, Murch RL (1996) Assessment and prediction of stress-related growth. Journal of Personality 64(1): 71-105.

15. Fontana A, Rosenheck R (1994) Traumatic war stressors and psychiatric symptoms among World War11, Korean and Vietnam War veterans. Psychology and Aging 9(1): 27-33.

16. Solomon Z (1993) Immediate and Long-Term Effects of Traumatic Combat Stress among Israeli Veterans of the Lebanon War. In: Wilson JP, Raphael B (Eds.) International Handbook of Traumatic Stress Syndromes. The Plenum Series on Stress and Coping. Springer, Boston, MA, USA, pp. 321-332.

17. Mac Lean A, Elder GH (2007) Military service in the life course. Annual Review of Sociology 33(1): 175-196.

18. King LA, King DW, Vicker K, Davison EH, Spiro A 3rd (2007) Assessing late-onset stress symptomatology among aging male combat veterans. Aging and Mental Health 11(2): 175-191

19. Vogt S, Tanner LR (2007) Risk and resilience factors for posttraumatic stress symptomatology in Gulf War I veterans. Journal of Traumatic Stress 20(1): 27-38.

20. Brewin CR, Andrews B, Valentin JD (2000) Meta-analysis of risk factors for posttraumatic stress disorder in trauma exposed adults. Journal of Consulting and Clinical Psychology 68(5): 748-766.

21. King LA, King DW, Fairbank JA, Keane TM, Adams GA (1998) Resilience-recovery factors in post-traumatic stress disorder among female and male Vietnam veterans: Hardiness, postwar social support, and additional stressful life events. Journal of Personality and Social Psychology 74(2): 420-434

22. Vogt D, Smith B, Elwy R, Martin J, Schultz M, et al. (2011) Predeployment, deployment, and postdeployment risk factors for posttraumatic stress symptomatology in female and male OEF/OIF veterans. Journal of Abnormal Psychology 120(4): 819-831.

23. Lee KA, Vaillant GE, Torrey WC, Elder GH (1995) A50-year prospective study of the psychological sequelae of World War II combat. The American Journal of Psychiatry 152(4): 516-522.

24. Dandeker C, Greenberg N, Orme G (2011) The UK's Reserve Forces: Retrospect and Prospect. Armed Forces and Society. Sage Publications, USA Armed Forces & Society 37(2): 341-360.

25. Mc Cranie EW, Hyer LA (2000) Posttraumatic stress disorder symptoms in Korean conflict anmaWorld War II combat veterans seeking outpatient treatment. Journal of Traumatic Stress 13(3): 427-439.

26. Fleming RH (1985) Post-Vietnam syndrome: Neurosis or sociosis? Psychiatry 48(2): 122-139.

27. Schnurr PP, Spiro A III, Aldwin CM, Stukel T ((1998) Physical symptom trajectories following trauma exposure: Longitudinal findings from the Normative Aging Study. Journal of Nervous and Mental Disease 186(9): 522-528.

28. Ikin JF, Sim MR, McKenzie DP, Horsley KWA, Wilson EJ, et al. (2007) Anxiety, post-traumatic stress disorder and depression in Korean War veterans 50 years after the war. British Journal of Psychiatry 190: 475-483.

29. Orr KD, Fainer DC (1952) Cold injuries in Korea during the winter of 1950-51. Medicine 31(2): 177-220.

30. Keane TM, Caddell JM, Zimmering R, Taylor KL, Mora CA (1989) Clinical evaluation of a measure to assess combat exposure. Psychological Assessment 1(3): 53-55

31. Horrowitz MJ (1975) Intrusive and repetitive thoughts after experimental stress. General Psychiatry 32(11): 1457-1463.

32. Spiro III A, Settersten RA, Aldwin CM (2015) Long-term outcomes of military service in aging and the life course: A positive re-envisioning, Gerontologist 56(1): 5-13.

33. Moyers F (1996) Oklahoma City bombing: Exacerbation of symptoms in veterans with PTSD. Archives of Psychiatric Nursing 10(1): 55-59.

34. Hunt N, Robbins I (2001) The long-term consequences of war: the experience of World War II. Aging and Mental Health 5(2): 183-190.

35. Spiro III A. Schnurr PP, Aldwin CM (1991) PTSD and combat-related psychiatric symptoms in older veterans. PTSD Research Quarterly 2 (1): 1-8.

DOI: 10.32474/CTBB.2019.01.000120