

論文の内容の要旨

論文題目 “Social support and depressive symptoms among military veterans aged 65 years and older living in Thaibinh, Vietnam

和訳 ベトナム、タイビン省における 65 歳以上の退役軍人のソーシャルサポートと鬱の関連

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1. Background

Postwar survivors of combat continue to suffer from ill health. It has been seen among military service members from World War II, the Vietnam War, the Middle East conflict, and the Persian Gulf War. According to studies conducted among veterans of World War II, the Persian Gulf War, and the Korean War chronic mental health problems are prevalent among them. World War II veterans still experience war-related psychological distress even after fifty years. The study among older Korean War veterans reports over five times more depressed than the non-veteran group. Depressive symptoms among postwar veterans increase over time.

After the Vietnam War, the vast majority of American combat veterans were depressed. Classical depressive symptoms such as psychomotor retardation, difficulties in initiating and maintaining sleep, feeling of worthlessness, and concentration and memory difficulties were often present. Many veterans had generalized sense of helplessness about their experiences in Vietnam and prospects for the future.

The situation of the Vietnamese veterans was different. Vietnamese had justified reasons for engagement in the war. However, the casualties those Vietnamese veterans experienced were more than those of any other nation's veterans who involved in the Vietnam War suffered. After the Vietnam War, about 300,000 American veterans were wounded while the number was about 1,700,000 for Vietnamese veterans. Many studies on depressive symptoms have been conducted among American veterans of Vietnam War but not among Vietnamese veterans.

Victims of traumatic events cope with psychological difficulties they experience in many ways. Social support has been indicated as one of the important strategies to cope with such situation. In the situation of war stressors, previous studies found that combat veterans with low levels of social support are more likely to experience elevated levels of distress, or that social support sustains the person through the emotional turbulence following a trauma. Social support has been shown as an important protecting factor for depressive symptoms among elderly people in general population. Among the group of the elderly veterans, social support had the important role in post-

war adjustment. Social support was a predictor of depressive symptoms at later life among veterans of the World War II and the Korean War. Support from family had the role of helping them adapt to civilian life and sometimes to come to terms with the long-term effects of wounds. Support from friends, especially friends through the war service, was a valuable resource for discussing war experiences among World War II veterans.

Previous study reported that marital status emerges as an important predictor of mental health. This can be explained that late-life support by the spouse is of importance to their psychological health. Widowhood has been found to be strongly associated with depression in some instances. In addition, people who remain single lack filial and spousal support. Under such circumstances, life events may thus be rendered much more unbearable, especially at an advanced age.

2. Objectives

The objectives of the study are as follows. The first one was to describe the sources of social support among the elderly veterans in Thaibinh, Vietnam. The second one was to identify the association between three sources of social support and depressive symptoms among the Vietnamese veterans. For this, we hypothesized that veterans who had more social support experience less depressive symptoms, and this association may vary between the sources of social support. The third objective was to identify the association between social support and depressive symptoms in relation to

marital status. We hypothesized that the non-married veterans had lower levels of total social support (particularly family support) and higher levels of depressive symptoms than the married veterans. We also hypothesized that the association of non-family social support such as friend support would be greater among the non-married veterans than among married veterans. The information might be useful in identifying a high risk group for poor mental health and establishing a way of intervention for the high-risk group in Vietnamese veterans.

3. Methods

From June to August 2010, we conducted this cross-sectional study in Thaibinh, Vietnam. We included male military veterans aged 65 years and older who participated in the Vietnam War. We used a random sampling method to select 6 communes from totally 287 communes. This study was conducted through face-to-face interviews with a structured questionnaire among 828 participants in six communes in Thaibinh, Vietnam. This study was approved by the Ethical Committee of the University of Tokyo, Japan, and the Ethical Committee of Thaibinh Medical University, Vietnam.

Depressive symptoms were measured by the Center for Epidemiological Studies Depression Scale (CES-D). Social support was measured by the Multidimensional Scale of Perceived Social Support (MSPSS). War-related factors were characterized by wound in wartime history and history of loss of relative(s)/friend(s) during wartime.

Physical disability was measured by two scales: the Activity of Daily Living (ADL) scale and the Tokyo Metropolitan Institute of Gerontology Index of Competence (TMIG-IC) scale. Simultaneous linear regression was used to identify the association between social support and depressive symptoms, stratified by marital status. The factors included in the model were: socio-demographic factors, war-related factors, physical disability, and social support. We performed all statistical analyses using the Stata version 11. We conducted univariate and bivariate analysis to describe the sources of social support and to examine the association between depressive symptoms and social support. Multivariate analysis were employed to determine the association between social support and depressive symptoms, accounting for all confounding factors.

4. Results

The married veterans reported significantly higher scores on all three sources of support including support from family ($p < 0.001$), support from friends ($p < 0.001$), and support from significant other ($p < 0.001$) compared to non-married veterans. Total social support was also significantly higher in the married group as compared to the non-married group ($p < 0.001$). Total scores on the depressive symptoms among married veterans was lower than among non-married veterans. Average CES-D was significantly higher in the non-married group (22.54 ± 11.37) than in the married group (14.02 ± 8.2 ; $p < 0.001$)

The association between depressive symptoms and total social support were described according to participant's marital status. In both of married and non-married veterans, social support were significantly negatively associated with depressive symptoms ($p < 0.001$).

On the other hand, three sources of social support were uniquely associated with depressive symptoms among married and non-married veterans. The association between social support and depressive symptoms was stronger in non-married veterans than in married veterans. Family support shows strong association among married, but not among non-married. Also, friend support was significantly associated with depressive symptoms among non-married, but not among married veterans. Significant other support was not associated with depressive symptoms both in married and non-married veterans.

5. Conclusions

In conclusion, this study elucidated the sources of social support including family support, friend support and significant other support, and association between social support and depressive symptoms among elderly military veterans aged 65 years and older in Thaibinh, Vietnam.

The married veterans reported higher scores on all three sources of support compared to the non-married veterans. However, total social support was negatively

associated with depressive symptoms among both group of married and non-married veterans. Family plays an important role in supporting elderly veterans in Vietnam in the relation with depressive symptoms, which is particularly true for the married-veterans.

This study suggest that the non-married veterans are at higher risk of depression, which makes social support become more meaningful for them in terms of predicting depressive symptoms compared to the married one. Among different types of social support to the non-married veterans, friend support had significant association with depressive symptoms. This result implies that the role of friends in alleviating mental health problems seems to be important among non-married veterans.

Veterans in Vietnam had different characteristics as compared to veterans from other countries involved in the Vietnam War; veterans with functional disabilities also appeared to report higher levels of depressive symptoms. Nevertheless, social support remained an important factor associated with their depressive symptoms. Therefore depressive symptoms should be of concern of not only health staff members but also family and friends around the elderly veterans.

The ease of obtaining a high response rate is itself an indication of interest in the effects of war experience in the veteran population. Evidence presented here demonstrate that there is a need for a comprehensive understanding of social support and depressive symptoms among veterans in their later life. Veterans are now in their

70s and 80s and still looking forward to many years of active and fulfilling life as long as their needs are recognized and acted upon.