

## Original Article

# The Association Between Depressive Symptoms and Age in Cancer Patients: A Multicenter Cross-Sectional Study

Saho Wada, MD, Ken Shimizu, MD, PhD, Hironobu Inoguchi, MA, Haruki Shimoda, MPH, Kazuhiro Yoshiuchi, MD, PhD, Tatsuo Akechi, MD, PhD, Megumi Uchida, MD, PhD, Asao Ogawa, MD, PhD, Daisuke Fujisawa, MD, PhD, Shinichirou Inoue, MD, Yosuke Uchitomi, MD, PhD, and Eisuke Matsushima, MD, PhD

*Department of Psycho-Oncology (S.W., K.S., H.I.), National Cancer Center Hospital, Chuo-ku, Tokyo; Section of Liaison, Psychiatry and Palliative Medicine (S.W., E.M.), Graduate School of Medical and Dental Sciences, Tokyo Medical and Dental University, Bunkyo-ku, Tokyo; Department of Mental Health (H.S.); Department of Stress Sciences and Psychosomatic Medicine (K.Y.), Graduate School of Medicine, The University of Tokyo, Bunkyo-ku, Tokyo; Department of Mental Health Policy and Evaluation (H.S.), National Institute of Mental Health, National Center of Neurology and Psychiatry, Kodaira-shi, Tokyo; Division of Palliative Care and Psycho-oncology (T.A.), Nagoya City University Hospital, Nagoya-shi, Aichi; Department of Psychiatry and Cognitive-Behavioral Medicine (T.A., M.U.), Nagoya City University Graduate School of Medical Sciences, Nagoya-shi, Aichi; Division of Psycho-Oncology (A.O., D.F.), Research Center for Innovative Oncology; Department of Psycho-Oncology Service (A.O., D.F.), National Cancer Center Hospital East, Kashiwa-shi, Chiba; Department of Neuropsychiatry (S.I.), Okayama University Graduate School of Medicine, Dentistry and Pharmaceutical Sciences, Okayama-shi, Okayama; and Innovation Center for Supportive, Palliative and Psychosocial Care (Y.U.), National Cancer Center, Chuo-ku, Tokyo, Japan*

---

## Abstract

**Context.** There is controversy around the association between depressive symptoms and age in adult cancer patients.

**Objectives.** The aim of this study was to evaluate the following hypotheses: 1) cancer patients' depressive symptoms decrease with age, and 2) in individuals aged 65 years or older, depressive symptoms increase because of the effect of somatic symptoms.

**Methods.** We retrospectively analyzed a database of 356 cancer patients who were consecutively recruited in a previous multicenter cross-sectional study. Depressive symptoms were assessed by the Patient Health Questionnaire-9 (PHQ-9), and correlations with age and other factors were assessed by hierarchical multivariate regression analysis. Age was entered as the dependent variable in the first step, patient characteristics and cancer-related variables were entered in the second step, and somatic symptoms were entered in the last step. We analyzed this model for both the total sample and the subpopulation aged 65 years or older.

**Results.** In the total sample, the PHQ-9 score was significantly associated with lower age, fatigue, and shortness of breath (adjusted  $R^2$  14.2%). In the subpopulation aged 65 years or older, no factor was associated with the PHQ-9 score (adjusted  $R^2$  7.3%).

**Conclusion.** The finding that depressive symptoms in cancer patients decreased with age was concordant with our first hypothesis, but the second hypothesis was not supported. Younger cancer patients were vulnerable to depressive symptoms and should be monitored carefully. Further studies using more representative samples are needed to examine in detail the association between depressive symptoms and age in older cancer patients. *J Pain Symptom Manage* 2015;50:768–777.

© 2015 American Academy of Hospice and Palliative Medicine. Published by Elsevier Inc. All rights reserved.

## Key Words

Age, cancer, depression, oncology, somatic symptoms

---

## Introduction

Depression is one of the most common psychiatric diseases in cancer patients, and its symptoms are a

significant burden to them. The prevalence rate of any form of depression in cancer patients, including major and minor depression and dysthymia, has

---

Address correspondence to: Ken Shimizu, MD, PhD, Department of Psycho-Oncology, National Cancer Center Hospital, 5-1-1, Tsukiji, Chuo-ku, Tokyo, Japan. E-mail: [keshimiz@ncc.go.jp](mailto:keshimiz@ncc.go.jp)

Accepted for publication: July 13, 2015.

been reported to range from 20.7% (95% confidence interval [CI] 12.9%–29.8%) in oncologic and hematologic settings to 24.6% (95% CI 17.5%–32.4%) in palliative care settings,<sup>1</sup> both of which are higher than that in the general population.<sup>2</sup> Depressive symptoms reduce cancer patients' understanding of and adherence to medical interventions,<sup>3</sup> decrease quality of life,<sup>4</sup> and increase suicide rates<sup>5</sup> and requests for euthanasia.<sup>6</sup>

To identify patients at risk of depressive symptoms, provide optimal ongoing care, and establish effective interventions, it is critical to consider a wide range of factors associated with depression, including biopsychosocial dimensions, and to understand which of these are strongly related to depressive symptoms. Previous studies identified numerous factors, including demographic, medical, and social factors.<sup>7–9</sup> Age, in particular, is an important factor in cancer care because the number of older cancer patients is growing rapidly as life expectancy increases worldwide.<sup>10</sup> It has been reported that approximately 60% of all cancers occur in people older than 65 years and that this population accounts for 70% of cancer mortalities.<sup>11,12</sup> Aging is associated with physiological decline, increased comorbidities, and in older cancer patients, requests for less treatment.<sup>10,12–15</sup> In this context, individualized cancer care based on lifestyle and demographic factors is required.

It was recently reported that in general adult populations, depressive symptoms were negatively associated with age, but they increased in older adults, yielding a U-shaped pattern.<sup>16,17</sup> The reason depressive symptoms decrease from young adulthood to middle age is that younger individuals experience intense social stressors but lack the necessary coping mechanisms, whereas people acquire increased wisdom as they age.<sup>18,19</sup> Although, in older adults, depressive symptoms increase again because of disease burden, functional limitations, life circumstances, psychological processes, and negative life events.<sup>16–19</sup>

However, there is some controversy regarding the association between depressive symptoms and age in cancer patients.<sup>20</sup> Although many studies reported that depressive symptoms in cancer patients decreased with age,<sup>7,9,21,22</sup> it is of note that the few studies that found the opposite had a higher mean subject age.<sup>23,24</sup> Nelson et al.<sup>23</sup> used the Hospital Anxiety and Depression Scale in a study of 716 prostate cancer patients (mean age 68 ± 10 years; range 50–93 years) and found that although aging was related to less anxiety, the mean depression subscale score increased with age. As is the case in the general population, depressive symptoms in cancer patients may decrease with age but increase again in older patients, but for different reasons, it is easy to imagine that younger

cancer patients cope less effectively with the intense stresses related to cancer, whereas older patients may experience more somatic symptoms.<sup>15,24–26</sup> We assumed that the standard age of 65 years may be an appropriate boundary because persons aged 65 years and older bear the greater burden of cancer,<sup>12</sup> and some multinational studies of depressive symptoms and depressive disorders used a cutoff of 65 years or older.<sup>27,28</sup> In addition, a previous study showed that physical function, social activity, and mental health decreased in cancer patients older than 65 years.<sup>15</sup> Among such older patients, increasing age can be associated with greater vulnerability. For instance, Nelson et al.<sup>23</sup> found that compared with patients younger than 75 years, a higher percentage of those aged 75 years or older scored above the cutoff for depression, whereas Ravi et al.<sup>29</sup> showed that depressive symptoms and depressive disorders were more common in patients older than 75 years.

Although somatic symptoms may function as stressors leading to depression,<sup>30</sup> they also may be depressive symptoms themselves, and indeed, the somatic symptoms of cancer or its treatments often overlap with those of depression.<sup>31</sup> Several diagnostic approaches have been developed to distinguish the etiology of somatic symptoms in this context, but none are yet established. It is useful to diagnose depression in cancer patients in the clinical setting, but we use diagnostic criteria under the assumption that nondepressive somatic symptoms may be present. This is the case whether we use structured clinical interviews or written self-report measures.

Based on the earlier mentioned factors, we hypothesized that 1) in adult cancer patients overall, depressive symptoms would decrease with age, and 2) in patients older than 65 years, however, depressive symptoms would increase because of somatic symptoms. To evaluate these two hypotheses, we used the database from a multicenter study involving a psycho-oncology network in Japan.

## Methods

### Setting and Subjects

This study entailed a secondary data analysis of a multicenter cross-sectional study, the primary purpose of which was to determine the validity of the Distress and Impact Thermometer, from May 2011 to December 2012, at two highly specialized hospitals (National Cancer Center Hospital and National Cancer Center Hospital East) and three university hospitals (The University of Tokyo Hospital, Okayama University Hospital, and Nagoya City University Hospital). We asked for the co-operation of each

Download English Version:

<https://daneshyari.com/en/article/5879578>

Download Persian Version:

<https://daneshyari.com/article/5879578>

[Daneshyari.com](https://daneshyari.com)