

Original Article

Type D Personality in Gastric Cancer Survivors: Association With Poor Quality of Life, Overall Survival, and Mental Health

Jia-kui Zhang, MD, Li-li Fang, MD, De-wei Zhang, MD, Qiu Jin, MD, Xiao-mei Wu, PhD, Ji-chao Liu, MD, Chun-dong Zhang, MD, and Dong-qiu Dai, MD

Department of Gastroenterological Surgery (J.-k.Z., D.-w.Z., J.-c.L., C.-d.Z., D.-q.D.) and Department of Psychiatry (Q.J.), The Fourth Affiliated Hospital of China Medical University, Shenyang; Department of Anesthesiology (L.-l.F.), The Second Affiliated Hospital of Zhejiang University School of Medicine, Hangzhou; and Department of Clinical Epidemiology and Center of Evidence Based Medicine (X.-m.W.), The First Hospital of China Medical University, Shenyang, China

Abstract

Context. The associations between Type D personality and poor quality of life, overall survival, and mental health in gastric cancer survivors.

Objectives. The aim of this research was to explore quality of life (QoL), mental health status, Type D personality, symptom duration, and emergency admissions of Chinese gastric cancer patients, as well as the relationship between these factors.

Methods. Eight hundred thirty eligible Chinese patients newly diagnosed with gastric cancer between July 2009 and July 2011 were enrolled in this prospective study. Type D personality was measured with the 14-item Type D Personality Scale (DS14). Mental health status was measured with the Hospital Anxiety and Depression Scale. The QoL outcomes were assessed longitudinally using the European Organization for Research and Treatment of Cancer Quality of Life Questionnaire—Core 30 and Quality of Life Questionnaire—STO22 at baseline and six months after diagnosis.

Results. The proportion of patients with symptom duration of more than one month and who were diagnosed after emergency admissions in the Type D group was significantly higher than that in the non-Type D personality group. At both of the time points, Type D patients reported statistically significant lower scores on role, emotional, cognitive, and social functioning (all $P < 0.001$) functional scales, global health status/QoL scales ($P < 0.001$), and worse symptom scores compared to patients without a Type D personality. During the six-month time frame, a higher percentage of patients in the Type D group demonstrated a considerable QoL deterioration. Clinically elevated levels of anxiety and depression were more prevalent in Type D than in non-Type D survivors (both $P < 0.001$). There was a statistically significant difference in three-year overall survival between the patients in the Type D group and the non-Type D personality group.

Conclusion. Type D personality is associated with poor QoL, three-year overall survival and mental health status among survivors of gastric cancer, even after adjustment of confounding background variables. The Type D personality group experienced increased levels of pain and fatigue compared to non-Type D patients. Type D personality might be a general vulnerability factor to screen for subgroups at risk of longer symptom duration and emergency admissions in clinical practice. J Pain Symptom Manage 2016;■:■–■. © 2016 American Academy of Hospice and Palliative Medicine. Published by Elsevier Inc. All rights reserved.

Key Words

Gastric cancer, Type D personality, referrals, health-related quality of life, health status

Introduction

Gastric cancer is the second most common cancer worldwide with an estimated incidence of 870,000

cases¹ per year, with nearly two-thirds of cases occurring in developing countries.² The incidence rate of gastric cancer in China is 30.77/100,000, and the

Address correspondence to: Dong-qiu Dai, MD, Department of Gastroenterological Surgery and Cancer Center, The Fourth Affiliated Hospital of China Medical University, 4

Chongshan Road, Shenyang 110032, China. E-mail: daidq1963@sina.com

Accepted for publication: December 23, 2015.

mortality of gastric cancer in China is 21.89/100,000.³ Because of improvements in treatment, there is a growing number of survivors who have to live with the long-term consequences of gastric cancer and its treatment.⁴ Therefore, in addition to traditional study end points such as postoperative recovery, morbidity, and survival, good quality of life (QoL) and mental health status have increasingly become major issues.

Most studies on survival focus on the role of clinical variables and sociodemographic factors to explain the differences in QoL among patients.^{5,6} However, there is still a significant gap in our understanding of the determinants in QoL and mental health status. In addition to fighting the disease itself, the management of the patient's personal mental stress associated with the cancer is equally important.⁷ Personality differences in individuals may be important in the above context and beyond clinical characteristics.

A distressed personality (Type D) is defined as the combination of two personality traits: the tendency to experience negative emotions (negative affectivity) and to inhibit self-expression in social interaction (social inhibition).⁸ People who scored high on negative affectivity have the tendency to experience negative emotions, whereas people who scored high on social inhibition have the tendency not to express these emotions, because of fear of rejection or disapproval by others. Hence, individuals with a Type D personality are inclined to experience emotional and interpersonal difficulties through different times and circumstances.

In the cardiovascular field, Type D has been an important research topic in recent years. Type D is recognized as an important determinant for adverse health outcomes, impaired health status and health-related QoL, and several forms of distress in patients with cardiovascular diseases.^{9–12} However, studies on Type D personality among cancer survivors are scarce.¹³

The emergency department (ED) plays a pivotal role in the evaluation of patients with gastric cancer. Many studies report worse QoL and outcome for patients with gastric cancer who present to the ED, both during their initial hospital stay and for their long-term survival.^{14–16} In a previous study, we also observed that ED referral patients endured significantly longer symptom duration before diagnosis.^{17,18} Patients with gastric cancers are asked to contact their general practitioner or specialist in case symptoms arise. This places the responsibility of making an appointment with the patient and not with the general practitioner or specialist and, therefore, leaves more room for someone's personality to interfere with his or her symptom duration.¹⁰ Therefore, we hypothesized that gastric cancer patients with a Type D personality have a longer symptom duration before diagnosis

because of the negative emotions and inhibition of self-expression in social interaction.

Therefore, we conducted this prospective study to compare QoL outcomes, overall survival, and mental health status in Chinese gastric cancer patients with a Type D personality vs. patients with a non-Type D personality. A secondary objective was to compare the symptom duration and proportion of emergency admissions in Chinese gastric cancer patients with a Type D personality vs. patients with a non-Type D personality and to explore factors related to impaired QoL and mental health status.

Methods

Setting and Participants

This study was performed at a tertiary-level teaching hospital of China Medical University with a total of 4000 beds and an annual ED volume of 180,000 patients in Shenyang, China. Between July 2009 and July 2011, Chinese patients with gastric cancer admitted to the hospital from the ED or referred from non-ED sources were enrolled in this prospective study. The eligibility criteria included age ≥ 18 years, a confirmed pathological diagnosis of gastric cancer, post-primary education, fluency in Chinese, and voluntary participation in this study. All patients provided written informed consent.

The exclusion criteria included 1) age older than 90 years at the time of the survey, as it was expected that these patients would have difficulty in completing a self-administered questionnaire without assistance, 2) cognitive impairment, death prior to the start of the second survey, or unverifiable addresses, 3) incomplete consent forms or missing identification.

The study was conducted with the permission of the Ethics Committee of the China Medical University, Shenyang, China. Surveys were constructed and revised through multiple focus groups with medical specialists in oncology, psychology, and surgery.

Data Collection

All questionnaires were administered by a single research assistant and completed by the patients at the time of diagnosis (after the first treatment) and at six months after diagnosis (during clinic visits).

All patients were followed-up regularly at one month intervals for clinical examination and carcinoembryonic antigen testing. If the patients did not visit the outpatient clinic at six months after diagnosis, the research assistant sent the patient a letter to inform them about the study and a copy of the questionnaire by a preaddressed and prestamped envelope. Nonrespondents were sent a reminder letter and questionnaire within one month.

Download English Version:

<https://daneshyari.com/en/article/5877956>

Download Persian Version:

<https://daneshyari.com/article/5877956>

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