

Original Research

Health Behaviors in Cervical Cancer Survivors and Associations with Quality of Life

Neel S. Iyer, MPH¹; Kathryn Osann, PhD^{2,3}; Susie Hsieh, PhD^{3,4}; Jo A. Tucker, PhD²; Bradley J. Monk, MD⁶; Edward L. Nelson, MD^{2,3,5}; and Lari Wenzel, PhD^{1,3,4}

¹Program in Public Health, University of California Irvine, Irvine, California; ²Department of Medicine, Division of Hematology/Oncology, University of California Irvine, Irvine, California; ³Chao Family Comprehensive Cancer Center, University of California Irvine, Irvine, California; ⁴Department of Medicine, General Internal Medicine, University of California Irvine, Irvine, California; ⁵Institute for Immunology, University of California Irvine, Irvine, California; and ⁶Creighton University School of Medicine at St Joseph's Hospital and Medical Center, Phoenix, Arizona

ABSTRACT

Purpose: Improvement in health behaviors following cancer diagnosis may contribute to better prognosis and well-being. This study examines the prevalence of health behaviors in cervical cancer survivors who have completed treatment, and associations between health behaviors and quality of life (QOL).

Methods: We recruited 204 women who had completed treatment for cervical cancer to participate in a randomized counseling intervention. Participants provided information on health behaviors (smoking, physical activity, and alcohol consumption); QOL (Functional Assessment of Cancer Therapy-Cervical questionnaire); and depression (Patient-Reported Outcomes Measurement Information System), anxiety (Patient-Reported Outcomes Measurement Information System), and distress (Brief Symptom Inventory) at baseline (9–30 months after diagnosis) and subsequent to the intervention. Data were analyzed using multivariate general linear models.

Findings: Participants ranged in age from 20 to 72 years at diagnosis (mean = 43 years), 41% were Hispanic, and 52% were non-Hispanic white. Three-fourths were stage 1 at diagnosis and 51% were treated with radiation with or without chemotherapy. At baseline, 15% of patients were current smokers, 4% reported alcohol consumption of > 10 drinks per week, and 63% reported exercising < 3 hours per week. Overall, 67.4% of cervical cancer survivors did not meet recommended national guidelines for at least 1 of these health behaviors. QOL scores were significantly

higher for patients with greater physical activity (128 vs 118; $P = 0.002$) and increased with the number of recommended guidelines met (P for trend = 0.030). Associations between patient-reported outcomes and smoking and alcohol consumption did not reach statistical significance. Participants who met guidelines for all health behaviors also had less depression ($P = 0.008$), anxiety ($P = 0.051$), and distress ($P = 0.142$). Participants who improved their aggregate health behaviors during the 4-month follow-up experienced a greater improvement in QOL than those who did not improve their health behaviors (10.8 vs 4.5; $P = 0.026$).

Implications: Results indicate that two-thirds of cervical cancer survivors are not meeting national guidelines for smoking, physical activity, and alcohol consumption following completion of definitive treatment. These adverse health behaviors were associated with impaired QOL and higher levels of depression and distress. Positive changes in health behaviors are associated with significant improvement in QOL. (*Clin Ther.* 2016;■:■■■–■■■) © 2016 Elsevier HS Journals, Inc. All rights reserved.

Key words: cancer, health behaviors, oncology, physical activity, quality of life, survivorship.

Accepted for publication February 6, 2016.

<http://dx.doi.org/10.1016/j.clinthera.2016.02.006>

0149-2918/\$ - see front matter

© 2016 Elsevier HS Journals, Inc. All rights reserved.

INTRODUCTION

Despite a decrease in cervical cancer incidence during the past 2 decades, cervical cancer represents a significant number of gynecologic cancers in the United States accounting for approximately 12,900 cases in 2015.¹ Because of improved screening and diagnostic methods, nearly half of all cervical cancer cases are diagnosed at stage 1 and more than three-fourths of cases are diagnosed at stage 2 or earlier.² The overall 5-year survival rate for stage 1 disease is 91%, whereas among all cases, 68% are expected to survive 5 years.¹ Because of the potential for long-term survival, lifestyle factors that may influence prognosis and quality of life (QOL) are important for cervical cancer survivors.

Smoking, lack of physical activity, and alcohol consumption are health behaviors that have all been identified as potential risk factors for cancer. Smoking, a causal factor for cervical cancer,³ is more common in women with cervical cancer than in women with other cancers⁴ and women without cancer.⁵ Physical inactivity is prevalent in cervical and gynecologic cancer survivors, with 60% to 70% identified as not meeting national recommendations,^{4,6,7} and has been associated with significantly higher risk for cervical cancer.⁸ Cancer survivors also report higher alcohol consumption compared with those with no cancer history.^{9,10} Furthermore, women with a history of alcohol abuse are at increased risk for cervical cancer.¹¹

These same health behaviors have been more recently examined for their contribution to recurrence and poor prognosis in cancer survivors. In prospective analyses, smokers with cervical cancer had more recurrences than nonsmokers, with significantly shorter relapse-free (28.5 vs 46.8 months) and overall survival (38.7 vs 50.1 months).¹² Compared with nonsmokers, women with cervical cancer who smoked had a greater likelihood of death from any cause (hazard ratio [HR] = 1.35; 95% CI, 1.17–1.56) and death from cervical cancer (HR = 1.21; 95% CI, 1.01–1.46).¹³ Heavy alcohol use, reported by 10% of advanced cervical cancer patients in another study, was associated with a significant decrease in disease-free (HR = 10.57; 95% CI, 2.07–53.93) and overall (HR = 10.80; 95% CI, 2.57–45.40) survival after adjusting for covariates.¹⁴ A number of studies have reported lower cancer and overall mortality with increased physical activity in cancer survivors, albeit mostly in patients with cancers other than of the cervix.^{15–18}

Better QOL is a strong predictor of improved prognosis and overall survival in cancer clinical trials,^{19,20} thus a growing body of literature has examined associations between health behaviors and QOL in cross-sectional data on cancer survivors. Whereas treatment and disease side effects contribute to compromised QOL in patients with cancer, evidence suggests that lifestyle factors may also play a role. Adherence to physical activity guidelines was associated with higher QOL in gynecologic cancer survivors,⁴ older female cancer survivors,²¹ and in a representative cross-section of cancer survivors.^{22–24} A positive association with QOL has also been observed with a combination of lifestyle behaviors, including physical activity, diet, and lower alcohol and/or tobacco consumption in survivors of ovarian,²⁵ endometrial,²⁶ breast,²⁷ colorectal,²⁸ and other cancers.^{4,6} The ability of interventions to improve QOL through health behavior changes is uncertain. Improved QOL following an exercise intervention has been reported in breast cancer survivors²⁹; however, a meta-analysis of 8 studies of ovarian and endometrial cancer survivors noted only nonsignificant improvements in QOL following physical activity interventions.³⁰

Although previous research has examined the prevalence of health behaviors and associations with quality of life in survivors of other cancers, few studies have focused specifically on the importance of lifestyle factors for cervical cancer survivors. The purpose of this study is to describe the prevalence of health behaviors (ie, physical activity, smoking, and alcohol consumption) among cervical cancer survivors participating in a randomized clinical trial of psychosocial telephone counseling and examine potential health behavior associations with QOL. We will also examine associations between longitudinal change in health behaviors and change in QOL, depression, anxiety, and psychological distress over follow-up.

METHODS

Research Design and Study Sample

Following approval by the Institutional Review Boards of the University of California, Irvine, and California Cancer Registry (CCR), cervical cancer survivors diagnosed between 2008 and 2012 were identified through the CCR and recruited to participate in a randomized psychosocial telephone counseling trial. Eligible patients were diagnosed with stage I to IVa cervical cancer, had completed definitive

Download English Version:

<https://daneshyari.com/en/article/5824951>

Download Persian Version:

<https://daneshyari.com/article/5824951>

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