# Healthy Behaviors

# Prevalence of uptake among cancer survivors

Rachel Hirschey, PhD, RN, Kirsten A. Nyrop, PhD, and Deborah K. Mayer, PhD, RN, AOCN®, FAAN



**BACKGROUND:** Although most cancer survivors adhere to recommendations to refrain from tobacco and minimize alcohol use, survivors of certain cancers are not meeting these recommendations. In addition, most cancer survivors do not achieve optimal recommendations for diet and physical activity, further decreasing survivor health and quality of life. Sun protective and sleep behaviors also tend to be suboptimal among survivors. Uptake of age-appropriate vaccinations is variable among survivors.

**OBJECTIVES:** The purpose of this article is to review the prevalence of healthy behavior uptake among cancer survivors and provide nurses with an overview of effective interventions, strategies, and resources to help patients improve these behaviors.

**METHODS:** An expert panel was convened to conduct an integrative review and synthesis on the state of the science of healthy behavior uptake among cancer survivors.

**FINDINGS:** Not meeting recommendations for healthy lifestyle behaviors increases the risk of second cancers and mortality and decreases overall health and quality of life. Healthy lifestyle behaviors can contribute to improved function, quality of life, and overall survival for cancer survivors. Nurses can help survivors to understand and improve their behaviors.

cancer survivorship; prevention; screening; tobacco cessation; weight management

DIGITAL OBJECT IDENTIFIER 10.1188/20.CJON.S2.19-29

IN THE EARLY 1980S, DOLL AND PETO (1981) estimated that 30%-50% of cancers were related to health behaviors, with the biggest contributors at that time being tobacco, alcohol, diet, occupation, and infection. Their findings are still relevant, and influential behaviors also include physical inactivity, obesity, and exposure to radiation (ionizing and solar) (Blot & Tarone, 2015). In addition, sleep (Stone et al., 2019) and uptake of age-appropriate vaccinations may change after one receives a cancer diagnosis, thereby having an impact on health. This article will review important health behaviors among cancer survivors, including tobacco and alcohol use, diet, physical activity, sun exposure, sleep, and vaccination. These behaviors vary between individuals living with and without a cancer diagnosis (Hawkins et al., 2017). In addition, this article will present effective interventions and strategies that nurses can use to improve these behaviors among cancer survivors. This is particularly important because cancer survivors are at higher risk for developing recurrences, new cancers, treatment sequelae, and comorbid conditions leading to poorer overall health (Jefford et al., 2017). Receiving a cancer diagnosis has also been identified as a teachable moment for many (Bluethmann et al., 2015), in which survivors are motivated to make behavioral changes (Clifford et al., 2018). Oncology nurses have frequent and comprehensive interactions with patients throughout the cancer continuum. As experts in delivering holistic, patient-centered care, nurses are not only ideally positioned but also ideally qualified to support cancer survivors to improve healthy behaviors (see Figure 1). By meeting recommendations related to tobacco and alcohol use, diet, physical activity, sleep, sun exposure, and vaccinations, survivors can experience better function, a higher quality of life, fewer comorbidities improved health, and longevity.

# **Health Behaviors Related to Cancer**

## Tobacco

Tobacco has been associated with cancer since the 1960s when the smoking rate for the adult U.S. population was 42% (American Cancer Society [ACS], 2019). Tobacco use in all its forms has been associated with an increased risk of lung, head and neck, esophageal, pancreatic, kidney, bladder, cervical, colorectal, and liver cancers, as well as acute myeloid leukemia. With decades of public health measures, the 2018 smoking rate for adults was 14% but varied by race/ethnicity, education, income, age, and geographic location (Centers for Disease Control and Prevention [CDC], 2019).

Across all health behaviors, refraining from tobacco use is the most adopted behavior among cancer survivors (Tollosa et al., 2019). Compared to the general population, smoking rates are similar or lower in cancer survivors and can