Lung Cancer Screening Guidelines: The Nurse’s Role in Patient Education and Advocacy

Rebecca H. Lehto, PhD, RN

Although the third leading cancer in incidence following breast and prostate, lung cancer is the principal cause of cancer death in the United States. The majority of lung cancer cases are detected at an advanced stage when surgical resection is no longer an option. Recent research has concluded that lung cancer screening with low-dose computed tomography for specific high-risk groups may reduce lung cancer mortality. Public awareness and the need for current information are growing regarding the state of the science relative to lung cancer screening for individuals at high risk for lung cancer. This article provides a historical perspective on the topic of lung cancer screening. The risks and benefits of screening are discussed, and current clinical practice guidelines are reviewed. Oncology nurses will need to be cognizant of the risks, benefits, and current guidelines related to lung cancer screening as they support patients and their families making informed decisions about personal health care.

Rebecca H. Lehto, PhD, RN, is an assistant professor in the College of Nursing at Michigan State University in East Lansing. The author takes full responsibility for the content of the article. The author did not receive honoraria for this work. The content of this article has been reviewed by independent peer reviewers to ensure that it is balanced, objective, and free from commercial bias. No financial relationships relevant to the content of this article have been disclosed by the author, planners, independent peer reviewers, or editorial staff. Lehto can be reached at rebecca.lehto@hc.msu.edu, with copy to editor at CJONEditor@ons.org. (Submitted August 2013. Revision submitted September 2013. Accepted for publication September 7, 2013.)

Key words: lung cancer; prevention and detection; patient/public education

Digital Object Identifier:10.1188/14.CJON.338-342

Background

Lung cancer is the leading cause of cancer death for men and women in the United States (Siegel, Naishadham, & Jemal, 2013). Although lung cancer is curable in its earliest stages with surgical intervention, most lung cancers are diagnosed when the disease is advanced (30% stage III, 40% stage IV), a factor that contributes to the poor survival statistics (Bach et al., 2012; Wender et al., 2013). Early lung cancer diagnostic methods, most often conducted when patients presented with problematic symptoms, largely relied on chest radiology and sputum cytology, which were unable to detect minute malignant nodules that signal cancer at its earliest stages (Mulshine & Sullivan, 2005; Pastorino, 2010). Although lung cancer screening is not without controversy (Tehranzadeh, 2013), focus on disease screening has intensified with the advent of sophisticated technologies, such as low-dose spiral computed tomography (CT), that are capable of detecting lung cancer nodules during their early growth phases (Wender et al., 2013). Media attention to lung cancer screening has increased, and patient advocacy organizations, such as Lung Cancer Alliance, have taken active roles in promoting screening for individuals at high risk for lung cancer (www.lungcanceralliance.org). The purpose of this article is to present the historical background relative to lung cancer screening, discuss risks and benefits, and review current practice guidelines. Such knowledge is essential for oncology nurses as they provide education and advocacy for patients and their families who will need access to current information to make informed personal healthcare choices.