Differences in Colorectal Cancer Risk Knowledge Among Alabamians: Screening Implications

JoAnn S. Oliver, PhD, ANP-BC, CNE, Patrick Ewell, PhD, Keith Nicholls, PhD, Kathryn Chapman, DrPA, and Sandra A. Ford, MD

Oliver is an associate professor in the Capstone College of Nursing at the University of Alabama in Tuscaloosa; Ewell is an assistant professor in the Department of Psychology at Kenyon College in Gambier, OH; Nicholls is an associate professor in the Department of Political Science and Criminal Justice at the University of South Alabama and associate investigator at the Mitchell Cancer Institute, both in Mobile; Chapman is the director of the Cancer Prevention Branch of the Alabama Department of Public Health in Montgomery; and Ford is the medical director at Internal Medicine Affiliates in Birmingham, AL.

No financial relationships to disclose.

Oliver, Ewell, Nicholls, Chapman, and Ford contributed to the conceptualization and design, analysis, and manuscript preparation. Oliver, Ewell, and Nicholls completed the data collection. Ewell and Nicholls provided statistical support.

Oliver can be reached at joliver@ua.edu, with copy to editor at ONFEditor@ons.org.

Submitted November 2014. Accepted for publication May 14, 2015.

Key words: colorectal cancer; cancer risk; colorectal cancer screening; cancer education

ONF, 43(1), 77-85.

doi: 10.1188/16.0NF.77-85

Purpose/Objectives: To explore differences in cancer risk knowledge and colorectal cancer (CRC) knowledge among adults in Alabama.

Research Approach: Telephone interviews were conducted using an 80-item questionnaire that included 14 demographic questions and 26 general questions regarding healthcare quality, sources of health-related information, and cancer fears and risk factors. Also included were 40 questions dealing with CRC perceptions and experiences (asked only of respondents aged 50 years or older).

Setting: A standard random-digit-dialed statewide telephone survey, targeting adult residents of Alabama. Interviews were conducted during about seven weeks in 2012.

Participants: 1,024 participants, including 615 who were aged 50 years or older. Most of the participants identified as Caucasian.

Methodologic Approach: A secondary data analysis using data from a CRC screening survey of Alabama residents conducted in 2012 by the University of South Alabama polling group via telephone.

Findings: Knowledge of general cancer risk factors predicted disagreement with the statement, "There is nothing you can do to avoid getting cancer," and disagreement with the statement, "Only people with signs or symptoms should be screened for CRC." Binary logistic regression showed that those higher in CRC risk knowledge were more likely to have been screened for CRC.

Conclusions: Knowledge of general cancer risk factors may increase self-efficacy. In addition, individuals with increased knowledge of colorectal cancer risk factors were more likely to participate in CRC screening.

Interpretation: Nurses play an instrumental role in addressing CRC, a preventable and treatable cancer. An opportunity exists for nurses and other healthcare providers to develop culturally appropriate educational interventions to increase knowledge related to CRC, risk factors, and screening, particularly among those who are at increased risk. This education needs to occur in clinical practice and within the community.

olorectal cancer (CRC) is a leading cause of cancer mortality and morbidity in the United States. It is the second leading cause of cancer death and the third most common cancer diagnosed in men and women (American Cancer Society [ACS], 2015a). Several risk factors for CRC are considered to be nonmodifiable, such as age, gastrointestinal disorders, and family history. Age is the primary risk factor for CRC, with 90% of cases occurring in those aged 50 years or older. Certain gastrointestinal disorders—including inflammatory bowel disease, Crohn's disease, and ulcerative colitis, as well as familial adenomatous polyposis and Lynch syndrome (also known as hereditary nonpolyposis CRC, Lynch syndrome is an autosomal dominant hereditary disease process)—can increase an individual's risk of cancer, specifically CRC (ACS, 2015b; Hampel et al., 2008). Personal or family history of CRC or colorectal polyps is also a risk factor. Aside from these risks, numerous modifiable risk factors also increase CRC risk, including lack