

## RESEARCH AND PRACTICE

**Promoting colorectal cancer screening among Haitian Americans**

Steven S. Coughlin, PhD, MPH<sup>1,2</sup>, Erica I. Lubetkin, MD, MPH<sup>3</sup>, Jennifer L. Hay, PhD<sup>4</sup>, Renald Raphael, MD<sup>5</sup>, and Selina A. Smith, PhD, MDiv<sup>6</sup>

<sup>1</sup>Department of Community Health and Sustainability, Division of Public Health, University of Massachusetts, Lowell, MA; <sup>2</sup>Department of Epidemiology, Rollins School of Public Health, Emory University, Atlanta, GA; <sup>3</sup>Sophie Davis School of Biomedical Education at The City College of New York, Department of Community Health and Social Medicine, New York, NY; <sup>4</sup>Memorial Sloan-Kettering Cancer Center, Department of Psychiatry and Behavioral Sciences, New York, NY; <sup>5</sup>Haitian American Public Health Initiatives, Mattapan, MA; and <sup>6</sup>Institute of Public and Preventive Health, and Department of Family Medicine, Medical College of Georgia, Georgia Regents University, Augusta, GA

**ABSTRACT**

**Background:** Few studies have examined colorectal cancer screening among Haitian Americans, although striking disparities in colorectal cancer screening and mortality are well-documented among U.S. Blacks. Race, socioeconomic status, and place of birth are factors associated with colorectal cancer incidence and mortality patterns.

**Methods:** In this article, we summarize published studies on colorectal cancer screening among Haitian Americans, identified through bibliographic searches in PubMed and CINAHL through August 2015, and offer recommendations for further research.

**Results:** Only one qualitative study and three quantitative surveys have examined colorectal cancer screening among Haitian Americans. A qualitative study found important differences in perceptions of the curability of colorectal cancer, preventive practices, and preferred sources of information among Haitian Americans and other ethnic subgroups of U.S. Blacks. Awareness of colorectal cancer screening tests, risk perception, healthcare provider recommendation, and self-reported use of screening are suboptimal among Haitian Americans and other subgroups. In preliminary quantitative studies, Haitian immigrants have been found to have lower colorectal cancer screening rates than other groups such as African Americans.

**Conclusions:** Culturally appropriate educational interventions are needed to encourage Haitian American adults aged  $\geq 50$  years to undergo screening for colorectal cancer and to ensure that they are well informed about the value of healthy eating and physical activity.

**Keywords:** Haitian Americans; colorectal cancer; health status disparities; prevention; screening

**INTRODUCTION**

Haitian immigrants are one of the fastest growing Caribbean immigrant populations (Buchanan et al. 2010). According to the U.S. Census, there were an estimated 929,074 Haitian Americans living in the U.S. in 2013 (U.S. Census). The largest proportions live in South Florida and in cities such as New York, Boston, Philadelphia, Chicago, and Atlanta. Haitian Americans include people who were born in the U.S. and those who were born elsewhere, including Haiti. Although French is an official language in Haiti and is widely spoken and understood, most Haitians speak Creole which is influenced by both French and West African languages. Most Haitian immigrants who have traveled to the United States (particularly those who have arrived recently) communicate in Creole and are either familiar with, or learn English. Haitian Creole is largely a spoken language (Spears et al. 2010). Most descendants of Haitians and Haitian immigrants living in the U.S. speak English fluently.

Few studies have examined colorectal cancer screening among Haitian Americans (Gwede et al., 2010, 2011; Ganv et al. 2008; Consedine et al. 2014; Seay et al. 2015; Wilcox 2015), although striking disparities in screening and mortality are well-documented among U.S. Blacks. In this article, we summarize published studies on colorectal cancer screening among Haitian Americans, identified through bibliographic searches in PubMed and CINAHL through August 2015, and offer recommendations for further research.

**BACKGROUND**

Race, socioeconomic status, and place of birth are factors associated with colorectal cancer mortality (Albano et al. 2007; Howlader et al. 2014). Although colorectal cancer incidence rates have declined in recent decades due to increases in routine screening and changes in risk factors, mortality rates have been consistently higher among U.S. Blacks than Whites (American Cancer Society 2014). However, we are unaware of any published estimates of

colorectal cancer mortality rates among Haitian Americans. During 2006 through 2010, the colorectal cancer mortality rate for Black men (29.4 per 100,000 population) was more than 50% higher than those for non-Hispanic White men (19.2) or Hispanic men (16.1) and more than twice as high as that for Asian/Pacific Islander men (13.1) (Siegel et al. 2014). Similar disparities were obtained among women. Possibly accounting for colorectal cancer disparities are a higher prevalence of risk factors among Blacks, decreased access to and lower utilization of healthcare services, and genetic or microbiomic influences (Tammana & Laiyemo 2014).

Challenges experienced by minorities and immigrant groups in receiving colorectal cancer prevention and treatment services include socioeconomic factors such as poverty and unemployment (Wilcox et al. 2015; Siegel et al. 2014). Based upon the broader literature on barriers to cancer screening in racial and ethnic subgroups in the U.S., other barriers that may prevent Haitians from accessing colorectal cancer screening services include locations of diagnostic and treatment facilities outside of the patient's neighborhood, lack of transportation, low health literacy, lack of understanding of colorectal cancer and how to prevent it, unavailability of support resources needed to access colorectal cancer screening and treatment services, lack of health care insurance, and lack of access to primary care (Decker & Singh 2014; Tammana & Laiyemo 2014). Other barriers to receiving colorectal cancer services that have been identified in non-Haitian populations in the U.S. include attitudes, beliefs, cultural factors, fear and mistrust, denial, uncertainty, and lack of information (Powe et al. 2009). For immigrant populations such as Haitian Americans, differences in culture and language may be relevant factors (Seay et al. 2015). Misperceptions about cancer and mistrust of the healthcare system can interfere with receipt of cancer services. In many communities, these challenges are worsened by disjointed, categorical provision of service and by the lack of a coordinated effort to address cancer screening and treatment challenges (Tammana & Laiyemo 2014).

The determinants of health disparities are complex and multifactorial in nature. They include biologic and behavioral factors and provider-, and health care system-related barriers including differences in income, education, and health insurance coverage (Tammana & Laiyemo 2014; Decker & Singh 2014). Although mortality studies in Haitian American populations have not been reported, the broader literature indicates that Black-White differences in colorectal cancer survival may be due to differences in stage-at-diagnosis; differences in tumor biology resulting in increased aggressiveness or resistance to treatment; socioeconomic factors influencing treatment options; increased comorbid conditions; suboptimal patient-physician interactions; and structural problems, such as lack of transportation and decreased access to quality care (Siegel et al. 2014; Tammana & Laiyemo 2014).

## RESULTS

Only one qualitative study (Gwede et al. 2011) and three quantitative surveys (Gwede et al. 2011; Seay et al. 2015; Wilcox et al. 2015) have examined colorectal cancer screening among Haitian Americans. In general, African-descent Caribbean populations are screened for breast, prostate, colorectal, and cervical cancers less frequently than U.S.-born African-Americans and at lower rates than recommendations and guidelines (Consedine et al. 2014; Seay et al. 2015). Haitian immigrants, in particular, have low screening rates. Both immigrant and non-immigrant African-descent Caribbean groups participate in screening less frequently than recommended. Studies of cancer screening among specific Caribbean groups of African-descent may yield data that both clarifies health disparities between U.S.-born African-Americans and Whites and identifies the specific subpopulations at risk in immigrant communities (Consedine et al. 2014; Seay et al. 2015).

The understanding of disparities related to awareness and perceptions about causes, risk factors, and screening for colorectal cancer among Haitian Americans is limited (Gwede et al. 2011). Grouping of U.S.-born Blacks and foreign-born Blacks as one homogeneous group obscures possible within-group differences (Gwede et al. 2011). In a study informed by community-based participatory research, the cultural perceptions of colorectal cancer among three ethnic subgroups of Blacks (African Americans [U.S. born], foreign-born Blacks from English-speaking Caribbean countries, and Haitian-born Blacks who resided in Hillsborough County, Florida) were explored (Gwede et al. 2011). A total of 62 individuals from the three ethnic subgroups participated in semi-structured, in-depth qualitative, and structured quantitative interviews. All of the participants stated that they had the ability to read and understand English. Qualitative findings revealed no major differences among the subgroups in their overall perceptions of cancer or their attitudes related to barriers, motivation, and resources for colorectal cancer screening (Gwede et al. 2011), although Haitians who did not understand English were excluded from the study. Differences were evident in perceptions of curability, preventive practices, and preferred sources of information among the subgroups. Awareness of colorectal cancer screening tests, risk perception, healthcare provider recommendation, and self-reported use of screening were low across all three subgroups (Gwede et al. 2010). However, only 55% of Haitian-born participants had heard about the fecal occult blood test, compared to 84% for English-speaking, Caribbean-born participants and 91% for African Americans. Similarly, only 15% of Haitian-born respondents had a colonoscopy compared to 50% for the English-speaking Caribbean and African American subgroups.

Wilcox et al. (2015) conducted a cross-sectional survey of factors associated with adherence to colorectal cancer screening guidelines among a random sample of households in Little Haiti, Miami-Dade County, Florida. Nearly half of the surveyed households (n=951) had never completed a bowel stool test or undergone colonoscopy. A quarter had

never completed either test (Wilcox et al. 2015). Colonoscopy use was lower among Haitian households (46%) compared with both non-Hispanic White (NHW) (63%) and non-Hispanic Black (NHB) households (54%) ( $p=0.002$ ).

Gany et al. (2008) surveyed a random sample of physicians serving first-generation Haitian immigrants in New York City, identified through their zip codes of practice. The participants completed a questionnaire about their beliefs, attitudes, and practices related to cancer screening and their perceptions of patient barriers to screening. A total of 50 of 87 physicians (58%) consented to participate in the study. The researchers created cancer site-specific and overall cancer screening scores for breast, cervical, and colorectal cancer screening. About 75% of the providers followed breast cancer screening guidelines, but only 16% for cervical cancer and 30% for colorectal cancer. None of the providers followed screening guidelines for all three cancer sites. The authors noted that the reported practices of providers serving the Haitian immigrant community in New York City were not consistent with practice guidelines. They recommended that efforts be made to: 1) reinforce screening guideline knowledge for physicians serving the Haitian immigrant community, 2) increase the utilization of health care systems that increase cancer screening, and 3) implement strategies to overcome patient barriers to screening. The New York City Department of Health and Mental Hygiene has made colorectal cancer screening a priority but information tailored for Haitian American residents is needed (Richards et al. 2011).

## RECOMMENDATIONS FOR FURTHER RESEARCH

Haitian Americans have a unique culture and belief system, and their health habits differ from other subgroups of U.S. Blacks (Lubetkin et al. 2015; Allen et al. 2013). There is a need for additional research on their colorectal cancer screening knowledge, attitudes, beliefs, and practices. Ideally, this research should include both recent immigrants and Haitians who have been living in the country for long periods of time. An approach involving community-based participatory research is likely to be helpful for addressing colorectal cancer disparities in Haitian American communities (CDC 2013). Evidence-based interventions that have been developed and found to be effective for African Americans and other groups should be adapted for use in promoting colorectal cancer screening among Haitian Americans and tested for effectiveness in randomized controlled trials or quasi-experimental studies (Carrasquillo et al. 2014). To maintain fidelity and minimize loss of intervention impact, evidence-based strategies should be used to guide the adaptation of interventions (Allen et al. 2012; Tu et al. 2014). Diffusion of Innovations Theory has been successfully used to adapt evidence-based interventions (Tu et al. 2014).

A study conducted by Gany et al. (2008) underscores the need for not only educational interventions aimed at Haitian Americans and studies that focus on primary care providers and health care systems that deliver care for Haitian

Americans and new immigrants. Multilevel interventions that target at-risk persons, underserved groups, neighborhoods, health care providers, and the health care system are more likely to be found to be effective in reducing health disparities.

To be successful, programs for the early detection of cancer should have to not only provide safe and effective screening (e.g., by encouraging providers to follow clinical guidelines and addressing quality assurance of screening) and address appropriate follow-up care for those persons with a positive screening test (Coughlin and Thompson 2005). Studies of the quality of follow-up care after abnormal cancer screening results have found that fewer than 75% of patients received such care (Yabroff et al. 2003). The percentage may be particularly low in immigrant and low-literacy populations. Although numerous studies have examined barriers to adherence with follow-up care for abnormal cancer screening test results, most of these have focused on cervical cancer screening among women (Eggleston et al. 2007a; Coker et al. 2007; Yabroff et al. 2000; Yabroff et al. 2003; Eggleston et al. 2007b). Relatively few studies have examined barriers to adherence with follow-up care for abnormal colorectal screening test results among men and women, and most studies on this topic have been observational rather than intervention research with a randomized or quasi-experimental design (Debnath et al. 2002; Baig et al. 2003; Zheng et al. 2006; Yabroff et al. 2005; Lurie and Welch 1999; Turner et al. 2003; Choi et al. 2012; Chao et al. 2009). We are unaware of any research on adherence with follow-up care for abnormal colorectal cancer screening test results among Haitian Americans. Disparities in colorectal cancer screening, incidence, and mortality rates are likely exacerbated by barriers to adherence with follow-up recommendations among those who have abnormal test results.

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