

Half of Premature Colorectal Cancer Deaths Due to Socioeconomic Inequality

ATLANTA – November 10, 2014 –Half of all premature deaths from colorectal cancer (described as deaths in people ages 25 to 64) in the United States are linked to ethnic, socioeconomic, and geographic inequalities, and therefore could be prevented according to a new study by American Cancer Society researchers. The report, which appears in the *Journal of Clinical Oncology*, found more preventable deaths occur in southern states than in northern and western states, but that in virtually all states those with the least education had significantly higher colorectal cancer death rates.

Colorectal cancer (CRC) is the third leading cause of cancer death for both men and women in the U.S. Historically, death rates were higher in those with higher socioeconomic status, in whites, and in northern states. Over the past few decades, though, that switched, with death rates now highest in persons with the lowest socioeconomic status, in blacks, and in southern states. That shift is likely the result of access to better early detection and treatment.

To better understand the extent to which these racial/ethnic and socioeconomic disparities vary within each state and contribute to premature death as a result of colorectal cancer, American Cancer Society researchers led by Ahmedin Jemal, Ph.D., looked at CRC death rates in people between ages 25 and 64 by state, race/ethnicity, and educational attainment (as a marker of socioeconomic status), using data from the National Vital Statistics System of the National Center for Health Statistics (part of the Centers for Disease Control and Prevention). The age range of 25 to 64 was chosen because in this age group, a greater number of life-years are lost and because cancer disparities are larger in this age group than in age 65 and above, in part due to differences in the availability of universal healthcare coverage.

The researchers found that among people ages 25 to 64, those with the least education had significantly higher CRC death rates in virtually all states for each racial/ethnic group. In the most dramatic example, in New Mexico those non-Hispanic whites with the lowest educational attainment were at more than three times the risk of CRC death as non-Hispanic whites with the highest educational attainment. The researchers conclude that half of all CRC deaths in those ages 25 to 64 that occurred nationwide from 2008 through 2010 would have been avoided if everyone had experienced the lowest death rates of the most educated whites, or 7,690 CRC deaths every year.

The authors say more premature deaths were avertable in southern states (60% to 70%) than in northern and western states (30% to 40%). When the analysis was restricted to those ages 50 to 64, for whom CRC screening is recommended, the disparities by educational attainment within state or cross states were remarkably similar.

The authors note that the factors that contribute to CRC disparities are complex and multifactorial. Differences in income, education, insurance status, and geographic residence between sociodemographic groups result in inequalities in the prevalence of CRC risk factors as well as in access to screening and treatment services. The prevalence of behavioral risk factors for CRC

varies geographically and is generally inversely associated with SES. Obesity, cigarette smoking, and red meat consumption increase CRC risk, whereas physical activity and anti-inflammatory drug use decrease risk.

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