Study Says Screening Accounts for Much of Black/White Disparity in Colorectal Cancer

Equal access to care could substantially reduce racial disparities in colorectal cancer

ATLANTA – May 3, 2012– A new study finds differences in screening account for more than 40 percent of the disparity in colorectal cancer incidence and nearly 20 percent of colorectal cancer mortality between blacks and whites. Differences in stage-specific survival, which likely reflect differences in treatment account for additional 35% of the black-white disparity in colorectal cancer mortality rates. The study, appearing early online in Cancer Epidemiology Biomarkers and Prevention, concludes that equal access to care could substantially reduce the racial disparities in colorectal cancer (CRC) rates.

Previous studies have identified considerable disparities in CRC incidence and mortality rates between blacks and whites in the United States. For the new study, researchers led by Iris Lansdorp-Vogelaar, a visiting scientist at the American Cancer Society when this project was conceived and developed , and now with Erasmus Medical Center, Rotterdam, The Netherlands, used a computer simulation model to apply the screening and survival rates seen among whites to the population of black Americans 50 and over, then compared those to actual, “observed” incidence and mortality rates in blacks to calculate how much of the existing racial disparities in CRC rates are attributable to differences in screening and/or stage-specific relative survival.

They found that applying the screening pattern observed among whites to blacks would close the disparity gap in CRC incidence rates in age 50 and older from 28.2 to 16.4 cases per 100,000. Screening would decrease the mortality gap from 26.8 to 21.6 deaths per 100,000. If blacks had the stage-specific relative survival of whites, the disparity in CRC mortality rates would decrease even further, to 17.2 deaths per 100,000. And when combined, the screening pattern and stage-specific relative CRC survival of whites would decrease disparity in CRC mortality to 12.4 deaths per 100,000.

The report finds differences in CRC screening explained 42% of the observed disparity in CRC incidence between blacks and whites and 19% of disparity in CRC mortality. Stage specific relative CRC survival differences explained 36% of the disparity in CRC mortality. Together, according to the study, differences in screening and survival explained 54% of disparity in CRC mortality. The authors say equalizing access to care could substantially reduce the racial disparities in CRC burden.

As for the remaining 46% to 58% of the disparity in CRC incidence and mortality, known or unknown lifestyle factors are the most likely candidates for the gap. Those include alcohol, smoking, obesity, and meat consumption, which increase the risk of CRC, as well as physical activity and postmenopausal hormone replacement therapy (in women), which decrease risk.

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