Study Identifies Factors Linked to Cancer Death Disparities

Smoking, physical inactivity and food insecurity are among eight county-level factors that account for income-related disparities.

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Despite an overall decrease in cancer mortality in the United States, disparities linked to geographic location and socioeconomic status persist. Now, new findings published in JAMA Network Open suggest that factors such as smoking and food insecurity contribute to widening cancer death differences in American counties, reports YaleNews.

For the study, Yale researchers gathered data from 3,135 counties to assess county-level cancer death rates and to identify possible mediators of the association between county-level median incomes and cancer death rates.

Findings revealed significant disparities in cancer deaths between low-, medium- and high-income counties. (The median income for low-income and high-income counties was $33,445 and $55,780, respectively.) The mean cancer death rate per 100,000 persons was 230 in low-income counties and 186 in high-income counties. The corresponding figure in medium-income counties was 205.

Eight county-level factors accounted for more than 80 percent of the income-related disparity. These included health risk behaviors (rates of obesity, smoking and physical inactivity), clinical care factors (unaffordable care and low-quality care), health environments (food insecurity) and health policies (state smoke-free laws and Medicaid payment rates).

“The most important of these factors appear to be food insecurity, smoking, physical inactivity and the quality of health care that is provided in the counties,” said Jeremy O’Connor, MD, the study’s first author.

However, Connor notes that no one single factor causes these disparities in cancer mortality but rather that these factors collectively are responsible for such gaps.

Researchers also went so far as to create maps to illustrate cancer death disparity rates in an effort to help public health officials identify specific factors affecting their counties and allow them to respond accordingly.

“Instead of every county addressing all eight factors, they can target their public health programs to the factors that are most important to their community,” O’Connor concluded. Such a method could help mitigate disparities.

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