Letter to Editor, CEBP

“Unmet Challenges in Cancer Disparities (1)” _ Letter

Janet M Hock, BDS, PhD1, Amelia Nealley1, Deborah Morrison1, Christopher Farah1, H. Dean Hosgood PhD, MPH2, Sheila Zahm, Sc.D2.

1 Maine Institute for Human Genetics and Health, Bangor, ME; 2 NCI Division of Cancer Epidemiology and Genetics.

Corresponding Author

JM Hock, BDS, PhD.
Maine Institute for Human Genetics and Health.
8215 River Bay Dr East,
Indianapolis
IN 46240
Email: jhock@emh.org
Cell: 207-951-2717
As recently reviewed by Gelhert and Colditz, cancer disparities in race and ethnicity are well recognized (2). We agree that much less is known about other population groups included in the definition of health disparities, and would like to add our observations on underserved whites in non-agrarian rural communities. Of the US population, 59 million (21%) who live in rural America commonly suffer disparities of isolation, poverty, and difficult access to health care. For example, in Maine, a rural state, whites have among the highest overall cancer incidence and death rates in the US (3, 4, Table 1).

A case series of 24 men and 60 women with cancer recruited from a community medical center serving northeast Maine illustrates the unhealthy profiles in a disadvantaged rural community. Data are expressed as percent or mean±sem. Participants diagnosed with cancer requiring surgical resection completed questionnaires. Cases were white, 65±1 years old with median BMI 28. There were 48 lung, 23 breast and 13 other cancers. 63% families reported household income below poverty level while 60% cases had less than college education. Cases reported 4.3±0.3 jobs/case with 25% reporting ever employment in shift work. Of the 84 cases, 13 men and 2 women reported military service for ~5 years. 43% cases reported one or more cancers prior to current diagnosis. Only 8% cases were in families with no cancer history; 82% reported average 4.6 first-degree relatives with cancer/family. Ever-smokers and current smokers comprised 56% and 24% of cases, respectively. Pack-years were 43±8 for men; 39±5 for women. 87% reported 39±2 years second-hand smoke exposure. Alcohol use over 44±6 years was reported by ever users (20%) and current users (62%).

Most cases (94%) had three or more co-morbidities. Cardiovascular diseases were reported by 77% men and 59% women with cancer. Cases reported respiratory disease (29%), arthritis (32%), and diabetes
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(21%). Ever use of OTC pain medications for 18±4 years duration was reported by 65% cases. 53% men and 38% women were current narcotic users for 4±2 years.

Our preliminary data complement and confirm conclusions presented by Gehlert and Colditz (1). Rural cases in northern New England have a high prevalence of unhealthy lifestyle factors and comorbidities. Research on cancer disparities in rural areas may offer unique opportunities to assess the effect of multiple concurrent risk factors, as well as genetic susceptibility.

References


Table 1. Age-Adjusted Incidence And Mortality Rates For Cancer Among People In Maine Compared To The US Overall, And To US African/Minorities To Illustrate The Higher Rates Among Population Subsets With Cancer Disparities.

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<tbody>
<tr>
<td><strong>INCIDENCE</strong></td>
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<tr>
<td>All cancers</td>
<td>595 (587, 604)</td>
<td>535 (535, 536)</td>
<td>459 (453, 466)</td>
<td>415 (414, 415)</td>
<td>516 (511, 521)</td>
<td>464 (464, 464)</td>
<td>478 (477, 479)</td>
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<tr>
<td>Lung</td>
<td>96.9 (93.6, 100.3)</td>
<td>83.6 (83.4, 83.9)</td>
<td>66.8 (64.4, 69.3)</td>
<td>57.3 (57.1, 57.5)</td>
<td>79.5 (77.5, 81.5)</td>
<td>68.5 (68.3, 68.6)</td>
<td>71.3 (70.8, 71.7)</td>
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<td>Bladder</td>
<td>48.2 (45.8, 50.6)</td>
<td>39.4 (39.3, 39.6)</td>
<td>13.5 (12.5, 14.7)</td>
<td>9.8 (9.7, 9.9)</td>
<td>28.3 (27.2, 29.6)</td>
<td>22.0 (22.4, 22.5)</td>
<td>115 (13,117)</td>
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<tr>
<td>Breast</td>
<td>128 (125, 132)</td>
<td>122 (122, 122)</td>
<td>116 (115, 117)</td>
<td>116 (115, 117)</td>
<td>116 (115, 117)</td>
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<tr>
<td><strong>MORTALITY</strong></td>
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<tr>
<td>All cancers</td>
<td>245 (240, 251)</td>
<td>228 (227, 228)</td>
<td>170 (166, 174)</td>
<td>159 (159, 159)</td>
<td>200 (197, 203)</td>
<td>187 (186, 187)</td>
<td>224 (223, 225)</td>
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<td>Lung</td>
<td>76.9 (73.9, 80.0)</td>
<td>71.1 (70.9, 71.3)</td>
<td>48.9 (46.8, 51.0)</td>
<td>43.8 (43.7, 44.0)</td>
<td>60.5 (58.8, 62.3)</td>
<td>55.4 (55.3, 55.6)</td>
<td>58.6 (58.2, 59.0)</td>
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<td>10.1 (9.0, 11.3)</td>
<td>8.2 (8.1, 8.3)</td>
<td>3.2 (2.7, 3.8)</td>
<td>2.3 (2.2, 2.3)</td>
<td>6.0 (5.5, 6.6)</td>
<td>4.6 (4.6, 4.7)</td>
<td>3.7 (3.6, 3.8)</td>
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<tr>
<td>Breast</td>
<td>22.5 (21.1, 24.0)</td>
<td>23.9 (23.8, 24.1)</td>
<td>32.4 (32.0, 32.8)</td>
<td>32.4 (32.0, 32.8)</td>
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