Are we overestimating lifetime cancer risks?
11 November 2019

"AIHW estimates were consistently higher than our competing mortality-adjusted estimates of lifetime risks of diagnosis and death for all five cancers," the authors found.

"Differences between AIHW and adjusted estimates declined with time for breast cancer, prostate cancer, colorectal cancer, and lung cancer (for men only), but remained steady for lung cancer (women only) and melanoma of the skin. In 2013, the respective estimated lifetime risks of diagnosis (AIHW and adjusted) were 12.7 percent and 12.1 percent for breast cancer, 18.7 percent and 16.2 percent for prostate cancer, 9.0 percent and 7.0 percent (men) and 6.4 percent and 5.5 percent (women) for colorectal cancer, 7.5 percent and 6.0 percent (men) and 4.4 percent and 4.0 percent (women) for melanoma of the skin, and 7.6 percent and 5.8 percent (men) and 4.5 percent and 3.9 percent (women) for lung cancer.

"Our results indicate that cancer agencies, including the AIHW, may overestimate the risks of people being diagnosed with or dying from a particular cancer."

The authors stressed that they were not criticizing the AIHW.

"The method used by the AIHW is employed by many cancer registries; further, software that facilitates accounting for competing risk was not available when AIHW began calculating lifetime risks."

The implications of the study results were that, "as lifetime risk estimates are widely cited in health promotion campaigns, they may cause public misperceptions of the risk of a cancer diagnosis or death", the authors wrote.

"Australian agencies should consider adopting methods for adjusting for competing mortality when estimating lifetime risks, as currently employed in North America and the United Kingdom, to increase the accuracy of their estimates," the authors...
concluded.

DOI: 10.5694/mja2.50376

Provided by University of Sydney

*This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.*