Researchers find differences in ovarian cancer risk factors by racial and ethnic groups

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Researchers conducting an international study of more than 11,000 ovarian cancer cases have found that selected ovarian cancer risk factors vary for women of different racial and ethnic backgrounds.

Led by Dr. Melissa Merritt and Dr. Nicola Meagher from the Daffodil Centre, in conjunction with researchers at the University of Hawaii Cancer Center, the study published last week in the American Journal of Epidemiology focused on factors that increase or reduce risk in women of Asian, Native Hawaiian and Pacific Islander, Hispanic and non-Hispanic white groups.

The Daffodil Centre is a joint venture between University of Sydney and Cancer Council NSW.

"This is important information that could contribute to the prevention of ovarian cancer by highlighting differences in risk factor associations in racial and ethnic populations where research is underrepresented," says Dr. Merritt.

The team analyzed data from 11 studies involving more than 27,000 women with and without ovarian cancer, including one study in Australia and 10 in the U.S. and Canada.

Racial and ethnic backgrounds were self-reported by the study
participants.

"We noted selected differences in the strength of these protective and risk factor associations across racial and ethnic groups. For example, the study showed that some factors associated with a lower risk of epithelial ovarian cancer such as the use of oral contraceptives, and having children, had an even stronger reduction in risk for Native Hawaiian, Pacific Islander and Asian women," said Dr. Merritt.

Women who used oral contraceptives for over five years had a lower risk of developing ovarian cancer, but Asian, Native Hawaiian and Pacific Islander women had an almost 70% lower risk compared to women who had never used oral contraception, while Hispanic and white women had around a 50% lower risk.

Similarly, Hispanic and white women saw only a 50% reduction in ovarian cancer risk after having three or more children, while Asian, Native Hawaiian and Pacific Islander women had a 68-90% lower risk compared to women with no children.

"Interestingly, we observed that Native Hawaiian or Pacific Islander women who reported having their tubes tied (tubal ligation) had a 75% lower risk of developing ovarian cancer compared to those who did not have this procedure. The same comparison in Asian, Hispanic and white women, by contrast, showed only a 22-32% reduction in risk. However, because this was the first study to evaluate tubal ligation and ovarian cancer risk in Native Hawaiian or Pacific Islander women, more research needs to be done to confirm these findings," says Dr. Merritt.

Ovarian cancer has one of the lowest survival rates of any cancer in Australia, and unlike many other cancers, survival has only slightly improved in recent decades. These findings are significant because they show the importance of people's racial and ethnic backgrounds when
assessing their risk for ovarian cancer and when implementing public health measures to lower risk.

"It was already known that there were differences in ovarian cancer incidence rates between racial and ethnic groups, but assessment of ovarian cancer risk factors has so far been done mainly in white women," says Dr. Merritt.

"This is the first study of its scale to separate Native Hawaiian and Pacific Islander women from Asian women, and the results will be important in delivering ovarian cancer public health programs in the future."


Provided by University of Sydney


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