# **Medical News**

Public Affairs and Media Relations 614-293-3737

## The James





#### Media Contact:

Amanda J. Harper
OSUCCC – James Media Relations
614-685-5420
Amanda.Harper2@osumc.edu

**NOTE TO EDITORS**: High-resolution video and images are available for use at <u>bit.ly/2R3eZbu</u> (password: breastfeeding).

#### Survey: Few Women Told By Doctor That Breastfeeding Can Reduce Cancer Risk

COLUMBUS, Ohio – A new survey shows that although nearly 60 percent of breastfeeding mothers knew about the link between breastfeeding and breast cancer risk reduction, just 16 percent say they learned this from a medical professional.

This is concerning, says study principal investigator <u>Bhuvana Ramaswamy</u>, MD, because women should be informed that breastfeeding can reduce breast cancer risk and improve mother's health. Epidemiological studies show strong correlation between prolonged breastfeeding and reduced risk of developing triple negative breast cancer, an aggressive form of breast cancer. This knowledge is especially relevant for African American women considering whether to breastfeed, who are two times more likely to develop triple negative breast cancer when compared with women of other ethnicities.

"We have a duty as a medical community to ensure our patients have reliable knowledge," said Ramaswamy, breast medical oncology division director at <a href="The Ohio State University Comprehensive Cancer Center - Arthur G. James Cancer Hospital and Richard J. Solove Research Institute">Institute</a> (OSUCCC – James). "When it comes from a professional, medical information is much more likely to affect people's choices. When it comes to breast cancer specifically, prevention is the best outcome."

For this study, OSUCCC – James researchers conducted a survey of 724 women who had at least one live birth. Survey respondents were recruited through the Ohio State University Wexner Medical Center primary care practices and a national clinical research registry.

While a majority of respondents – 92 percent – reported that they had chosen to breastfeed, only 56 percent of all respondents noted that they were aware of the link between prolonged breastfeeding and breast cancer risk reduction prior to making the decision. Among those that did not breastfeed, 59 percent say that knowledge of this risk reduction would have impacted their decision to breastfeed.

The data was published in the medical journal *Breastfeeding Medicine*.

### **Ongoing Research**

This survey was part of larger research effort at the OSUCCC - James exploring the specific mechanisms of how breastfeeding reduces a woman's risk for breast cancer.

Previous studies suggest that giving birth and breastfeeding lowers a woman's overall risk of developing breast cancer, with the most recent data pointing to breastfeeding being protective specifically against triple-negative breast cancers. African-American/black women have a disproportionately high rate of developing aggressive triple-negative breast cancer while also having higher birth rates and lower rates of breastfeeding. Research has also shown that women native to Africa have higher rates of breastfeeding and lower rates of breast cancer. The reasons how breastfeeding affect breast cancer risk remain unclear but research suggests that it may be related to pro-inflammatory processes coordinated by STAT3 activation.

Ramaswamy is leading a basic science study that will test the hypothesis that an overarching biologic mechanism of altered STAT3 activation triggering a proliferative/inflammatory environment in the breast tissue that did not undergo gradual involution following pregnancy and prolonged breastfeeding results in a higher risk for breast cancer. Knowledge gained in this study is expected to enhance knowledge of the biological mechanisms underlying the connection between breastfeeding and breast cancer risk, particularly difficult-to-treat triple-negative breast cancers. This will also help identify prevention strategies for mothers who are unable to breastfeed. The ongoing study is funded by <u>Pelotonia</u>, a grassroots cycling event that has raised more than \$156 million for cancer research conducted at the OSUCCC – James.

-30-

#### **About the OSUCCC – James**

The Ohio State University Comprehensive Cancer Center – Arthur G. James Cancer Hospital and Richard J. Solove Research Institute strives to create a cancer-free world by integrating scientific research with excellence in education and patient-centered care, a strategy that leads to better methods of prevention, detection and treatment. Ohio State is one of only 49 National Cancer Institute-designated Comprehensive Cancer Centers and one of only a few centers funded by the NCI to conduct both phase I and phase II clinical trials on novel anticancer drugs. As the cancer program's 356-bed adult patient-care component, The James is one of the top cancer hospitals in the nation as ranked by U.S. News & World Report and has achieved Magnet® designation, the highest honor an organization can receive for quality patient care and professional nursing practice. At 21 floors with more than 1.1 million square feet, The James is a transformational facility that fosters collaboration and integration of cancer research and clinical cancer care. For more information, visit cancer.osu.edu.