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Cancer patients turning to mass media and non-experts for info

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The increasing use of expensive medical imaging procedures in the U.S. like positron emission tomography (PET) scans is being driven, in part, by patient decisions made after obtaining information from lay media and non-experts, and not from health care providers.

That is the result from a three-year-long analysis of survey data, and is published in the article , "Associations between Cancer-Related Information Seeking and Receiving PET Imaging for Routine Cancer Surveillance – An Analysis of Longitudinal Survey Data," appearing in the journal *Cancer Epidemiology, Biomarkers & Prevention*. Andy S. Tan, Ph.D., a post-doctoral fellow with the University of Pennsylvania's Annenberg School for Communication, is the lead author of the study. Co-authors are Laura Gibson, Ph.D.; Hanna M. Zafar, MD; Stacy W. Gray, MD; Robert C. Hornik, Ph.D.; and Katrina Armstrong, MD.

Data for this analysis were obtained from a longitudinal cohort study comprising three annual mailed surveys between 2006 and 2008 and completed by patients diagnosed with breast, prostate, or colorectal cancers. Over 2,000 individuals participated in the study, funded by the National Cancer Institute.

"Clinical guidelines do not recommend PET for post-treatment surveillance among asymptomatic cancer survivors," explains Dr. Tan and the study's other authors. "Such procedures may result in unnecessary radiation exposure, anxiety, and morbidity associated with false-positive and false-negative results."

The study sought to understand what drives cancer patients to seek such inappropriate procedures, to help inform interventions or policies to stem their overuse. The authors theorized that exposure to cancer-related information may play a role. They suggested that the potential benefit of new medical technologies receives substantial attention in the lay media and may promote positive attitudes toward the role of imaging technology such as PET.

The study looked at two variables: information seeking from non-clinician sources (e.g., TV, radio, books, brochures, newspapers, magazines, the Internet, family members, friends, co-workers, support groups and other non-expert sources) and patient-clinician information engagement (e.g., treating physicians, other physicians or health professionals).

They found that seeking information from nonmedical sources was predictive of subsequent reported PET scan use while patient-clinician information engagement was not. They noted that the overall use of PET scans for routine surveillance seems modest (10-11% of those cancer patients surveyed), however this level of PET overuse may be problematic at the population level because of the large and growing number of cancer survivors.

"Our findings may have important implications for cancer survivors, health care providers, and health policy in the practice of advanced imaging use for routine follow-up," the authors conclude, while raising a follow-up question: Are PET promotional materials used by health care facilities misstating the benefits of PET given that the use of PET imaging for routine cancer surveillance is inconsistent with clinical practice guidelines for most malignancies? "Policies or professional guidelines may be necessary to ensure that health care facilities convey accurate and reliable facts about the appropriate forms of cancer follow-up to patients."