

Doctors should address reduced sense of taste and smell in cancer patients, Tulane study says

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Laura Perry, a doctoral student in psychology, and Michael Hoerger, an assistant professor of psychology, are part of the Tulane team that studied a reduced sense of taste and smell in some prostate cancer patients. Not pictured is Sarah Alonzi, the lead author of the study. Photo was taken prior to the COVID-19 pandemic. (Photo by Paula Burch-Celentano)

One in six men being treated for advanced prostate cancer experiences a reduced sense of smell and taste, a symptom that could cause increased anxiety among patients because it is also a side effect of COVID-19, according to Tulane

researchers.

A study published in the journal [*Supportive Care in Cancer*](#) says a reduced sense of smell and taste among some prostate cancer patients is largely associated with poor appetite and weight loss.

Although the data collection for the study predicated the COVID-19 pandemic, the results pose important implications for cancer patients undergoing hormone therapy, chemotherapy and/or bone antiresorptive during the coronavirus crisis.

“We wanted to make sure the article mentioned the significance of advanced prostate cancer patients experiencing losses in taste/smell as a side effect of their cancer treatment during the pandemic,” said Laura Perry, a Tulane doctoral student in psychology and one of the study’s authors. “Since it is a commonly known symptom of COVID-19, the experience may be appraised by patients as especially stressful at this time.”

Perry said most symptom assessments in cancer patients do not ask patients about their senses of taste or smell. “Our findings suggest these could be a valuable addition to routine assessments in prostate cancer,” she said.

The study surveyed 75 men with advanced prostate cancer, asking them about their appetite, nausea while eating, and taste and smell of food over a 15-month period. Of the patients questioned, 17% experienced poor taste of food and 8% poor sense of smell. Participants were more likely to experience reduced sense of taste if they were being treated with the drugs denosumab or docetaxel, and they were more likely to experience weight loss if experiencing poor taste of food or poor appetite. Nausea was associated with an increased likelihood of experiencing poor taste and smell.

The study incorporated demographics, treatments and weight data from electronic health records.

Participants of the study were from the greater New Orleans area, where food and eating are central to the city’s culture. If cancer patients can no longer enjoy the pleasure associated with food, that, too, can affect them emotionally, researchers said.

"For advanced cancer patients, losing their sense of taste and smell can have profound impacts on their emotional wellbeing and ability to engage with others socially," Perry said.

Lead author Sarah Alonzi, a lab manager in the [Tulane Department of Psychology](#), agreed. "I hope that communicating these findings improve patients' awareness that treatment-related reduction in taste and smell can occur, providing some reassurance for those experiencing these symptoms," she said.

Based on the findings of this study, the authors suggest that clinicians should regularly query patients for changes in sense of taste and smell, especially patients who are experiencing weight loss. During the pandemic, they said, it is especially important that clinicians make patients aware of the potential for treatment-related reduction in taste and smell to reduce COVID-19 anxiety.

The research team included authors from Tulane's uptown and downtown campuses, a collaboration cultivated by the [Louisiana Clinical and Translational Science Center](#) and [Louisiana Cancer Research Center](#).

In addition to Alonzi and Perry, the Tulane team included Michael Hoerger, assistant professor of psychology at the [Tulane School of Science and Engineering](#) and an assistant professor of psychology and psychiatry at the Tulane Cancer Center. Also part of the Tulane team was a group from the [Tulane Cancer Center](#), including Dr. Oliver Sartor, Charlotte Manogue, Patrick Cotogno and Elisa Ledet.

Lydia Chow of the Department of Internal Medicine at the Keck School of Medicine of the University of Southern California and Emma Ernst of the Tufts University School of Medicine also contributed to the study.