

Title: Usefulness of Podcasts to Provide Public Education on Prostate Cancer Nutrition and Lifestyle

Authors: Stacy Loeb, Adrian Rivera, Tatiana Sanchez Nolasco, Nataliya Byrne, Mariana Rangel Camacho, Evangelia Pitsoulakis, Sukhleen Bedi, Jaime E. Hart, Konrad H. Stopsack, Martha Shrubsole, Natasha Gupta, Lan Doan, Edward Giovannucci and Lorelei A. Mucci

Affiliations: From New York University Langone Health (SL, AR, TSN, NB, NG, LD); Manhattan Veterans Affairs Medical Center (NG, SL); Harvard T.H. Chan School of Public Health (JEH, KHS, EG, LAM); Brigham and Women's Hospital and Harvard Medical School (JEH), Vanderbilt University Medical Center (MJS); Leibniz Institute for Prevention Research and Epidemiology – BIPS (KHS), University of Bremen (KHS)

Background: Podcasts, or episodic digital audio recordings, are increasingly popular and represent a novel way to reach large audiences for public education. Nutrition and lifestyle are very important for patients with prostate cancer, but there are significant gaps in patient knowledge and clinical support. Our goal was to create a podcast series about nutrition and lifestyle in prostate cancer, and to prospectively test its usefulness as a tool to provide education to lay audiences.

Methods: We created a series of 7 podcasts about 1-) the importance of diet and lifestyle for prostate cancer prevention and survivorship, 2-) the 6 pillars of lifestyle medicine, 3-) results from clinical trials of intensive lifestyle modification, 4-) patient experience with lifestyle modification, 5-) the importance of heart health in prostate cancer, 6-) dietary patterns for optimal human and planetary health, and (7) strategies to incorporate healthy plant-based foods from a doctor and chef. Using the Dynata online survey panel, we recruited U.S. adults from the general public and patients with prostate cancer, with oversampling of Black adults, to listen to the podcasts and complete an online survey. The primary outcome of the study was the perceived usefulness of the podcasts (score >5 on a published 7-point Likert scale). Secondary outcomes were relevance to informational needs, satisfaction and ease of use, as well as knowledge and intentions toward lifestyle modification after listening to the podcasts.

Results: A total of 100 people have participated in the study to date, including 35 men and 32 women from general public and 33 patients with prostate cancer. The median age was 66. Self-reported race was Black (52%), White (43%), Mixed (2%), Asian (1%), Native Hawaiian/Pacific Islander (1%), and American Indian/Alaska Native (1%). Ethnicity was Hispanic in 7%. Overall, the podcast series was associated with high mean scores for perceived usefulness (6.0/7), relevance to informational needs (5.7/7), satisfaction (6.0/7) and ease of use (6.2/7). There was no significant difference in any of these metrics between non-Hispanic White participants and those from other racial/ethnic groups. After listening to the podcasts, 88% of knowledge questions about lifestyle in prostate cancer were answered correctly. 77% of participants would recommend the podcast to others, and 53% stated they would change behavior as a result of the podcast.

Conclusions: A podcast series about lifestyle and nutrition in prostate cancer was perceived as useful and associated with high rates of knowledge for patients with prostate cancer and the general public. Podcasts represent a promising new educational tool to raise awareness about nutrition and lifestyle across the prostate cancer continuum.

Funding Acknowledgements: This study is supported by the Prostate Cancer Foundation.

COI Disclosure Statement: SL reports a grant from Endo USA Inc/Keenova, consulting with Bayer, Astellas, and Savor Health, and ad boards with Endo USA Inc, Bayer, Doceree, Pfizer, Sumitomo, and Blue Earth, all unrelated to the study. NG reports consulting with Movember. LM reports equity interest in Convergent Therapeutics, consulting with Hollingsworth LLC, all unrelated to this study.