Barriers and Facilitators to Lifestyle Modification in Prostate Cancer

Stacy Loeb, Evangelia Pitsoulakis, Mariana Rangel Camacho, Tatiana Sanchez Nolasco, Nataliya Byrne, Adrian Rivera, Edward Giovannucci, Natasha Gupta, Jaime Hart, Lorelei A. Mucci, Martha J. Shrubsole, Konrad H. Stopsack, and Lan N. Đoàn

From New York University Langone Health (SL, EP, MRC, TSN, AR, NB, NG, LD); Manhattan Veterans Affairs Medical Center (SL, NG); Harvard T.H. Chan School of Public Health (EG, JH, LAM, KHS); Vanderbilt University Medical Center (MJS); Leibniz Institute for Prevention Research and Epidemiology – BIPS (KHS)

Background: There is growing data on the importance of nutrition and lifestyle in prostate cancer. Although a diagnosis of cancer is considered a "teachable moment" for lifestyle modification, there are many practical challenges for patients and clinicians. The objective of our study was to examine clinicians' perspectives on the barriers and facilitators to nutrition and lifestyle recommendations and modification for patients with prostate cancer.

Methods: We conducted one-on-one semi-structured interviews with 18 U.S. healthcare providers (physicians, advanced practice providers, and registered dietitians) who care for patients with prostate cancer. Participants represented different disciplines (medical oncology, radiation oncology, urology, and nutrition) and practice settings (e.g., academic, community, and Veterans healthcare systems). Interviews were conducted by an experienced qualitative researcher using a codebook informed by the Tailored Implementation in Chronic Diseases (TICD) framework. Interview transcripts were independently coded by two study members, regrouping for iterative consensus on the codebook and comparison of codes. NVivo qualitative software was used for organization and analysis.

Results: Table 1 summarizes the key results by TICD domain. Providers reported that patients with prostate cancer frequently express interest in nutrition and lifestyle modification, particularly as something that they can control while facing a cancer diagnosis. However, most health professionals, including registered dietitians, reported limited formal training on nutrition and lifestyle management for prostate cancer, with variable knowledge of relevant guidelines. While having a direct referral pathway to registered dietitians or organizational lifestyle programs serve as facilitators, staffing and reimbursement issues remain significant barriers that hinder effective lifestyle intervention for patients with prostate cancer. Additionally, societal factors including neighborhood availability of fresh food and safe exercise spaces, as well as societal norms and culture around food and physical activity, also play a role in lifestyle modification. All participants expressed interest in additional resources for patients and providers to facilitate lifestyle intervention efforts in prostate cancer care.

Conclusions: Although nutrition and lifestyle modification are of significant interest to patients with prostate cancer and their healthcare providers, participants described notable barriers at the patient, physician, organization, and societal levels. Suggestions for improvement include more educational resources for patients and providers, guidelines on lifestyle specific to prostate cancer, employing novel care pathways, and leveraging electronic tools to facilitate lifestyle intervention.

Funding Acknowledgement: This study was supported by a Prostate Cancer Foundation Challenge Award.

COI: SL reports a grant from Endo; ad boards for Endo, Blue Earth and Doceree; and consulting with Astellas and Savor Health (unrelated to this study). LAM reports equity interest in Convergent

Therapeutics, unrelated to this study. SL and NG report consulting with MovemberTM (unrelated to this study).

Table 1. Healthcare provider insights' on barriers and facilitators to nutrition and lifestyle intervention in prostate cancer

TICD Domain	Example Facilitators	Example Barriers
Patient Factors	Desire for control	Age, socioeconomic status
Individual Health Professional Factors	Personal interest in the topic	Lack of formal training on nutrition and lifestyle in cancer
Professional Interactions	Ease of referral to dietitians/health coaches	Coordination of lifestyle services is challenging
Guideline Factors	Familiar with nutrition guidelines	Lack of guidelines specific to prostate cancer
Incentives and Resources	Easy to send patient education through electronic record	Lack of relevant educational materials on lifestyle
Capacity for Organizational Change	Organizational lifestyle programs	Time pressure on providers
Social, Political and Legal Factors	Greater emphasis around healthy lifestyle in society	Food deserts, lack of places to exercise