May 2019
The Center for Energy Balance in Cancer Prevention and Survivorship, of the Duncan Family Institute, facilitates and conducts state-of-the-science research to understand the relationship between activity, nutrition, obesity and cancer, and uses this knowledge to optimize interventions to decrease cancer risk and improve cancer outcomes. The Center sponsors collaborative research, transdisciplinary educational opportunities and seminars to create, produce and disseminate innovative and practice-changing research results.

Getting to Know Hoda Badr, Ph.D.

Dr. Hoda Badr chose her path of research when her mother was diagnosed with cancer while she was in graduate school. "At the time, few had studied the quality of care and support cancer patients receive, and there was no good psychosocial support for families impacted by cancer," she explains. "The presence of cancer creates profound changes in family roles and relationships. It takes precedence over everything and everyone. As humans, we try to retain a sense of normalcy in the face of cancer and act as if nothing is different. Actually, nothing is ever the same."

A social/health psychologist by training, Dr. Badr has long studied how situations shape people's behaviors and perceptions in various relationship contexts. She earned her Ph.D. in Social Psychology (focusing on chronic illness as a relationship challenge) from the University of Houston and held a Postdoctoral Fellowship at M.D. Anderson Cancer Center, Department of Behavioral Science, on spousal communication and adjustment in lung cancer.

Today, she is Associate Professor (tenured) in the Department of Medicine: Epidemiology and Population Sciences at Baylor College of Medicine, Co-Leader of the Cancer Prevention and Population Sciences Program, Dan L. Duncan Cancer Center, and the Leader of the Cancer Survivorship Disease Oriented Working Group, Dan L. Duncan Cancer Center, in Houston. Prior to joining Baylor, she served as both Instructor, Division of Cancer Prevention and Population Sciences and Assistant Professor, Department of Behavioral Science, Division of Cancer Prevention and Population Sciences, at M.D. Anderson, and more recently, Assistant Professor and Associate Professor, Department of Oncological Sciences, Icahn School of Medicine at Mount Sinai, New York, N.Y.

"What distinguishes my work is its focus on the role of family factors in cancer treatment and rehabilitation. My mission is to develop, implement, and disseminate psychosocial interventions to improve patient and caregiver health behaviors and quality of life (QOL). My work spans the entire cancer prevention and control continuum, including studies of couples coping with pre-neoplastic conditions, like Barrett’s Esophagus (BE)."

"Barrett’s patients usually have dysplastic changes in the lining of their esophagus, from uncontrolled gastroesophageal reflux disease (GERD), and are at high-risk for esophageal adenocarcinoma. Because it is believed that obesity and lifestyle factors may modulate the susceptibility for the progression of GERD to Barrett’s esophageal cancer, Barrett’s patients are advised to make a number of lifestyle changes to effectively manage their reflux disease (achieving and maintaining a healthy body weight, quitting smoking, and avoiding alcohol and foods that may exacerbate GERD symptoms and promote changes that may lead to cancer)."

To-date, no studies have prospectively evaluated Barrett’s patients’ QOL or whether they make and maintain these recommended lifestyle changes. From a couples’ perspective, lifestyle changes recommended for the patient actually involve both partners, with spouses being the most influential reported source of influence. Spousal influence can be positive; however, it can also lead to negative interactions that can fuel patient resistance. By evaluating the effects of the spousal environment on patients’ motivation to make and maintain the lifestyle changes and including both partners in the research process, the full scope of barriers to lifestyle change and maintenance after a BE diagnosis can be understood and appropriate strategies for future intervention identified.

"It is important that we learn how to leverage spousal caregiving to improve Barrett’s patients’ outcomes," adds Dr. Badr. "We know married couples’ outcomes are better than individuals who live alone, but why? What is it about being in a relationship that helps? In our research, we want to better learn how couples negotiate lifestyle changes and how healthcare systems can help them achieve these goals. If a spouse can help their loved one stop smoking, drinking, lose weight and manage their lifestyle and reflux disease, there are multiple interventions we can design to better ensure patient compliance, and improve QOL."