Researcher Profile: Sara H. Javid, MD, FACS



Dr. Sara H. Javid

Surgical intervention remains the cornerstone of curative treatment for most cancers, yet among many racial/ethnic groups there remains dramatic variation in the use, timing, and outcomes of surgery following a cancer diagnosis. Nowhere is this variation starker than among the American Indian and Alaskan Native population (AI/AN), which has the worst five-year survival across cancer types among all racial/ethnic groups in the United States. The Centers for Disease Control and Prevention's report on cancer mortality

from 1975 to 2004 demonstrated a decline in mortality among all racial/ethnic groups except for AI/AN patients. The causes of this overwhelming disparity remain largely unknown. Compounding the issue is the lack of previous research on the AI/AN population; because this group comprises only 1.7% of the US population, it has traditionally only been evaluated as part of a broader minority cohort.

For the past four years, Sara H. Javid, MD, FACS, Assistant Professor, Division of General Surgery, has been a key member of the Collaborative to Improve Native Cancer Outcomes (CINCO), a multi-faceted program aiming to improve cancer health outcomes and quality of life specifically for AI/AN patients. With funding from the National Cancer Institute and led by Principal Investigator Dedra Buchwald, Professor of Medicine, CINCO's investigators, including Dr. Javid, have examined both macro and micro-level factors contributing to the disparities in cancer survival observed in AI/AN patients, with the ultimate goal of identifying tangible means to improve AI/AN cancer outcomes at both the individual patient-provider level and at the broader public policy level.

Dr. Javid and UW Department of Surgery colleagues, Dr. David Flum and Dr. Tom Varghese, along with Dr. Michael Porter in UW Department of Urology and Dr. Arden Morris at University of Michigan, have focused their efforts on better understanding one such key factor affecting cancer outcomes: the variation in quality and timing of cancer treatment nationally among AI/AN patients. In a first-of-its-kind study published in the journal Cancer, Dr. Javid and colleagues utilized the SEER-Medicare database to investigate whether racial disparities exist in the receipt of national guidelineconcordant cancer treatment¹. They observed that AI/AN patients were significantly less likely to undergo primary surgical therapy for the four most common cancers (breast, colon, prostate, and lung) and significantly less likely to receive guideline-concordant adjuvant therapy for breast and colon cancer compared with white patients. Not surprisingly. non-receipt of guideline-concordant care was linked to worse survival. Importantly, however, Dr. Javid and her team demonstrated that if guideline-concordant treatment was received, and cancer stage and demographics controlled for, then cancer-specific survival of AI/AN and white patients did not significantly differ. In another study recently submitted to the American Journal of Public Health (AJPH), Dr. Javid and

colleagues examined delays in cancer treatment and non-treatment among AI/ANs². They found that rates of non-treatment were substantially higher in AI/ANs than in whites for breast, colon, prostate, and lung cancer. However, the timeliness of cancer treatment did not differ between AI/ANs and whites for any cancer except prostate.

Dr. Javid and the CINCO group have also reported on the micro-level factors that are believed to contribute to disparities in AI/AN cancer treatment and survival. In a systematic review published in 2013 in the AJPH, the authors discussed the importance of shared decision-making in minority populations³. For AI/AN patients in particular, they emphasized the need to extend the traditional patient-physician dyad model of shared decision-making to include the views of the patient's family and larger community. Dr. Javid, through CINCO, is also participating in qualitative interview studies of AI/AN patients and their surgeons to elucidate perceived barriers to the receipt of cancer treatment across WA State. The results of these studies will elucidate potential targets for intervention with the goal of improving cancer outcomes for AI/AN patients.

Through her work with CINCO and her personal experience treating patients with breast cancer, Dr. Javid has learned that, aside from survival and recurrence statistics, a highly prioritized concern among not only AI/ANs but all patients is the impact of cancer therapy on quality of life. In addition to her work with CINCO, Dr. Javid is the Principal Investigator on a pilot project funded by the **Department of Surgery** Research Reinvestment Fund, entitled "Prioritizing Patient Reported Outcomes (PROs) in Breast Cancer Surgery". This project aims to create an adapted PROs tool to assess quality of life following breast cancer surgery that will help guide breast cancer surgical quality improvement activities. The project is a qualitative research collaboration between surgeons and breast cancer patients. Dr. Javid and her team, including members of the **Surgical Outcomes Research Center (SORCE)** and patient advisors, plan to develop a PROs tool that measures quality of life outcomes important to patients undergoing breast cancer surgery and can also serve to define new benchmarks for surgical quality in the field of patient-reported outcomes.

¹Javid SH, Varghese TK, Morris AM, Porter MP, He H, Buchwald D, Flum DR: for The Collaborative to Improve Native Cancer Outcomes (CINCO). Guideline-concordant cancer care and survival among American Indian/Alaskan Native patients. Cancer. 2014 Apr 7. Doi: epub 10.1002/cancr.28683. [PMID: 24711210]

² Varghese TK, Javid SH, Morris AM, Porter MP, He H, Buchwald D, and Flum DR. Delay and Failure to Initiate Conventional Cancer Treatment in American Indian and Alaska Native Patients. Submitted Am J Public Health, July 2014.

³Mead EL, Doorenbos AZ, **Javid SH**, Haozous EA, Alvord LA, Flum DR, Morris AM. Shared Decision-Making for Cancer Care Among Racial and Ethnic Minorities: A Systemic Review. **Am J Public Health.** 2013 Dec; 103(12):e15-29. [PMID: 24134353]