

ABSTRACTS • 43rd Annual Meeting • American Society of Preventive Oncology, Hilton Tampa Downtown, Tampa, Florida, March 10–12, 2019



The following are the 14 highest scoring abstracts of those submitted for presentation at the 43rd Annual ASPO meeting held March 10–12, 2019, in Tampa, FL.

A Comparison of Mortality-to-Incidence Ratio with Survival Analyses in Assessing Racial Breast Cancer Disparities Across South Carolina Counties

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The mortality-to-incidence rate ratio (MIR) provides a population-based measure of survival which accounts for incidence. The use of MIR as a surveillance tool has shown that South Carolina (SC) exhibits more extreme racial differences in cancer incidence, mortality and MIR than other states or the nation. We assessed the effectiveness of MIR as a proxy for 5-year survival time (5YST) among breast cancer (BrCa) patients in South Carolina. Methods: The 5YST was computed from data on BrCA cases which were obtained retrospectively from the SC Central Cancer Registry from 2002 to 2010. The MIR was computed from Cancer incidence and mortality data which were obtained from the SC Community Access Network (SCAN). The underlying data for SCAN were generated from the SC Central Cancer Registry and SC DHEC Vital Records and used to construct MIRs. ArcGIS 10.2 was utilized to map BrCA MIRs by race for 46 counties within SC. Seven categories of MIR were derived using the national MIR for BrCA as reference. 5YST was computed for all BrCA cases in each county utilizing SAS software and this was mapped with MIR per county. Exploratory and geographically weighted regression analyses were conducted in ArcGIS to determine the relationship between MIR and MST. Results: A total of 2155 breast cancer patients (nWhites = 1557/72%; nBlacks = 598/28%) were reported in the study period. A visual inspection of the MIR maps by race showed that Blacks were in the highest MIR category while the MIR by 5YST map showed that higher MIR was likely associated with lower 5YST. By contrast, the MIRs for Whites were more evenly represented over the seven categories. Overall, the 5YST was 92.8% among blacks and 95.6% among whites. Assessment of MIR with MST in ArcGIS utilizing exploratory ArcGIS regression showed that there was statistically significant Global Moran's I p value indicative of clustering. Conclusions: The MIR proved useful for identifying disparities in BrCA incidence and mortality among Black and White women in SC. Cancer surveillance programs may use the MIR to monitor disparities across racial/ethnic groups and geographic regions going forward. MIRs have the potential to serve as an indicator of the long-term success of cancer surveillance programs.

Published first March 4, 2019

doi: 10.1158/1055-9965.EPI-19-0089

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Results of a Randomized Pilot Trial of SHARE: A Self-Management Intervention for Head and Neck Cancer Patients Undergoing Radiotherapy and their Spousal Caregivers

Badr H, Chhabria K, Sandulache VC, Chiao E, Wagner T

Head and neck cancer (HNC) patients experience significant physical and psychological morbidity during radiotherapy (XRT) which contributes to treatment interruptions and poor quality of life. Although spouses/partners can help by encouraging patient self-management (e.g., self-care) during XRT, they often experience high psychological distress rates, lack basic healthcare knowledge/skills, and report increased marital conflict regarding patient self-management. This pilot study examined the feasibility and acceptability of a six-session telephone-based intervention called SHARE (Spouses coping with the Head And neck Radiation Experience), which teaches self-management, communication, and coping skills to HNC patients and their spouses. Treatment effects of SHARE relative to usual medical care (UMC) in controlling patient physical symptoms and improving patient/spouse psychological and marital functioning were also examined. METHODS: Thirty patients initiating XRT and their spouses ($N = 60$ participants; 40% racial/ethnic minorities) were randomized to SHARE or UMC, and pre- and post-intervention assessments were completed. RESULTS: Solid recruitment (70%) and low attrition rates (7%) demonstrated feasibility. Strong program evaluations and homework completion rates (72%) supported acceptability. Significant treatment effects (medium in magnitude) were observed for SHARE relative to UMC with regard to HNC-specific physical symptom burden (Cohen's $d = -0.89$) and symptom interference ($d = -0.86$). Medium-to-large effects favoring SHARE were also found for patient and spouse depressive symptoms ($d = -0.84$) and cancer-specific distress ($d = -1.05$). CONCLUSION: Findings support the feasibility, acceptability, and preliminary efficacy of SHARE. They also suggest that programs that empower HNC couples with the necessary skills to coordinate care and manage the challenges of XRT together hold great promise for controlling patient physical symptoms and improving both partners' psychological functioning.

Published first March 4, 2019

doi: 10.1158/1055-9965.EPI-19-0088

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BLOOD CANCER DISCOVERY

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Cancer Epidemiol Biomarkers Prev 2019;28:620.

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