(95% CI, 1.18–1.51) among never or former smokers (p-trend < 0.001). This positive trend for PCa mortality was mainly observed among men with BMI measured more than 5 years before diagnosis, and among those age >65 years old at diagnosis. Compared with never smokers, current smokers had significantly elevated risk of PCa death, with a HR of 1.92 (95% CI, 1.52–2.43) regardless of the time of measurement, age at diagnosis and BMI. After further adjusting for tumor stage and grade, the association between BMI, smoking and PCa death was attenuated but remained statistical significant. CONCLUSIONS: In this consortium study of eight large cohorts, smoking and overweight/obesity before diagnosis were significant predictors for subsequent PCa-specific mortality. Smoking significantly modifies the association of BMI and PCa-specific mortality.

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Acculturation and Ethnic Variations in Breast Cancer Risk Factors, Gail Model Risk Estimates and Mammographic Breast Density

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Breast cancer (BC) incidence varies across countries and across US ethnic groups. US Immigrants often exhibit an intermediate level of risk between those observed in their birth country and in the US. This transition of risk may partly be explained by uptake of risk factors associated with acculturation. Investigating whether immigration and acculturation risk patterns are similarly reflected in disease biomarkers can provide insight into mechanisms underlying the transition of risk. We examined differences in the distribution of BC risk factors, absolute risk estimates and mammographic density by ethnicity and acculturation. We used data from 366 women recruited from an urban mammography clinic (ages 40–64 years) to compare BC risk factors and Gail model risk estimates across US-born white, US-born African American [AA], US-born Hispanic and foreign-born Hispanic women. We used linear regression models to examine the associations of immigration and acculturation indicators (e.g., generational status, age and life stage at immigration, language use) with percent density and dense breast area, measured from mammograms. Differences in BC risk factors were mostly observed for ethnic groups, with white women having higher reproductive and lifestyle risk profiles (e.g., lower parity, older age at first birth, higher alcohol intake), Hispanics having shorter height and AAs having larger body mass index (BMI) and waist circumference. The average lifetime and 5-year Gail estimates were highest in whites (11.4% & 1.4%), intermediate in AAs (7.2% & 1.0%) and lowest in Hispanics (6.9% & 0.7% in US-born and 6.6% & 0.8% in foreign-born). After adjusting for age, BMI and parity, lower linguistic acculturation, shorter residence in the US, and later age at immigration were associated with lower percent density (all p values for trend across acculturation levels <0.05); e.g., monolingual Spanish and bilingual speakers respectively had on average 5.6% (95% CI, −10.0–−1.3) and 3.8% (95% CI, −8.1–0.4) lower percent density than monolingual English speakers. Similar but more modest associations were observed for dense area. The increase in BC risk after immigration to the US and subsequent acculturation may operate via influences on mammographic density in Hispanic women.

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Decision Making about Contralateral Prophylactic Mastectomy Among BRCA1/2 Noncarriers with Newly-diagnosed Breast Cancer: Examining Cognitive, Emotional, and Sociodemographic Influences

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Pre-surgical BRCA1/2 genetic testing provides valuable risk information to guide a newly-diagnosed breast cancer patient's decision about whether to have a contralateral prophylactic mastectomy (CPM) to reduce her future risk of cancer in her unaffected breast. Although BRCA1/2 mutation noncarriers face a much lower objective ten-year risk of developing contralateral disease (approximately 3–10%) as compared to the risk of BRCA1/2 mutation carriers (27–37%), some noncarriers still choose to undergo a CPM. The psychosocial factors that motivate this decision are not well understood and warrant investigation. Thus, as part of a prospective study of pre-surgical BRCA1/2 testing, we examined the frequency and psychosocial correlates of the decision to undergo a CPM among newly-diagnosed breast cancer patients who were identified as BRCA1/2 mutation noncarriers. Self-report questionnaire data from 90 BRCA1/2 noncarriers (median age = 43 years, range = 29–59) were analyzed. A sizeable minority of the BRCA1/2 noncarriers (24.4%) chose to undergo a CPM after learning their mutation status (compared to 88% of the 8 BRCA1/2 carriers in the sample). Both bivariate and multivariable analyses indicated that perceiving that one's physician had recommended CPM (OR = 11.17, $P = 0.007$), perceiving greater risk for contralateral breast cancer (OR = 6.46, $P = 0.02$), and perceiving greater pros of CPM (OR = 1.37, $P = 0.004$) were all significantly associated with noncarriers' decision to undergo CPM. However, factors including age, Ashkenazi Jewish ethnicity, breast cancer-related distress, perceived cons of CPM, and decisional conflict regarding CPM were not related to the CPM decision (all ps > 0.05). Results demonstrate that although noncarriers' decision making regarding CPM was unrelated to sociodemographic and emotional factors, their cognitive perceptions of contralateral disease risk, surgical benefits, and physician recommendations were particularly important. Future studies should examine the content of patient-physician communication regarding CPM and hereditary risk in greater detail, and explore how these conversations shape and interact with women's past experiences, emotions, and beliefs to influence their cancer prevention decisions.

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