



# Associations Between Cancer Worry and Sleep Complaints

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## Introduction

Evidence from literature on associations between sleep and cancer indicates that 30-50% of individuals with a cancer diagnosis report sleep complaints. We hypothesized that cancer worry is associated with sleep complaints among women with no specific

## Methods

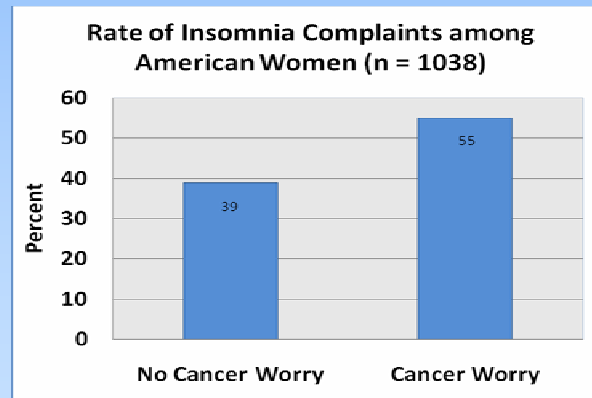
Women were 1038 community-based Brooklyn residents (age range: 50-70 years) participating in a cross-sectional aging study; 28% were white and 72% black. Participants were recruited using a stratified, cluster sampling technique. Trained interviewers of the same ethnicity as the participants gathered data regarding sociodemographic factors, physical health characteristics, sleep complaints, and cancer worries.

Insomnia complaint was defined as a report of either difficulty initiating sleep, difficulty maintaining sleep, or early morning awakening. Cancer worry was assessed using the Cancer Attitude Inventory. Our analysis focused on the item anchoring concerns about developing breast cancer.

## Results

The proportion of women reporting that they worried about developing breast cancer was 62%. Overall, 49% of the women reported an insomnia complaint. About a quarter of the women indicated that cancer worry affected their mood (27%) or their daily activity (25%).

Fisher's Exact test showed the rate of insomnia complaints was significantly greater among women with cancer worry [ $\chi^2 = 25.17$ ,  $p < 0.001$ ]; the estimated odds ratio was: [OR = 1.92, 95% CI:1.48—2.47,  $p < 0.001$ ].



**Figure Legend:** Values represent percent of women (ages 50-70 years) with no cancer history who reported insomnia complaints: difficulty initiating sleep, difficulty maintaining sleep, or early morning awakening.

Logistic regression analyses, adjusting for effects of ethnicity, stress, and perceived risk of developing cancer, yielded odds ratios for insomnia complaints of [OR = 1.52, 95% CI:1.15—2.02,  $p < 0.001$ ].

Thus, even after adjusting for effects of covariates, the odds of reporting sleep complaints for women who worry about cancer without a diagnosis were 52% greater than odds for women who reported no cancer worry.

## Conclusions

More than half of the women worrying about breast cancer are likely to report insomnia complaints, notwithstanding the fact that those women did not have a history of cancer.

Although fewer black women reported breast cancer worry and insomnia complaints, they were as affected as white women by the impact of worry on

## References

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