Prevalence of comorbidities in women with and without breast cancer in Soweto, South Africa: results from the SABC study.

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ABSTRACT

Background: Comorbidities occurring concurrently in breast cancer patients can be burdensome as they may negatively influence time and stage at presentation in breast cancer patients.

Objective: The purpose of this study is to describe the comorbid health conditions among South African black women with and without breast cancer and also to determine factors associated with advanced stage presentation of breast cancer.

Methods: A population based case control study on breast cancer was conducted on black women, in South Africa. Lifestyle information, and blood samples were collected from 399 women with histologically confirmed new cases of invasive primary breast cancer, recruited prior to any therapy, and their 399 age and neighbourhood matched controls without breast cancer. We compared self-reported metabolic diseases, depression, anthropometric measurements, blood pressure measurement, HIV-status and point-of-care lipid and glucose levels between patients with breast cancer and their control group. Ethics: This study was approved by the University of the Witwatersrand Human Research Ethics Committee (Approval Number: Ml4O98O, dated: 10th November 2014) and by the IARC ethics committee.

Result: In the whole population, the mean age was 54.6±12.9, the majority (81.2%) of the participants were overweight or obese, 85.3% had abdominal adiposity, 61.3% were hypertensive, 47.1% had impaired fasting plasma glucose, 8.4% had elevated total cholesterol, 74.8% had low HDL and 10.9% were assessed to be depressed. Ninety-one percent of the whole cohort had at least one metabolic disease. In the breast cancer group 72.2% had one or more metabolic diseases alone (HIV negative and no evidence of depression) compared to 64.7% from the control group. From a multivariate logistic regression adjusted model, a higher household socio-economic status had a 19% reduction in odds of having advanced stage breast cancer at diagnosis while hypertension, dyslipidaemia and HIV were not significantly associated with stage at breast cancer diagnosis in the adjusted model.

Conclusion: A large proportion of women are experiencing several comorbidities, highlighting the need to address the chronic NCD epidemic in South Africa and to coordinate multidisciplinary primary, secondary and tertiary level care in our complex health care system for better outcome.