

**Thames Cancer Registry at 50 years****16:45 - HORMONE RECEPTOR STATUS AND ETHNICITY IN WOMEN WITH BREAST CANCER IN NORTH EAST LONDON**

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**Objectives**

To determine the association between ethnicity and triple negative breast cancer (defined as tumours negative for oestrogen receptor (ER), progesterone receptor (PGR) and human epidermal growth factor receptor 2 (HER-2) status) in North East London.

**Methods**

Electronic pathology reports received by the Thames Cancer Registry (TCR) from the North East London Cancer Network (NELCN) on patients diagnosed with breast cancer between 2005 and 2007 were collated. The status of ER, PGR and HER-2 were extracted, and a single record per patient created. Women were coded as not having triple negative disease if at least one receptor was positive or borderline, and coded with triple negative disease if all three were negative. These records were matched to data from TCR on women resident in NELCN diagnosed with breast cancer in the same period. Logistic regression was used to quantify the association between triple negative breast cancer and ethnicity, adjusting for age, year of diagnosis and socioeconomic deprivation.

**Results**

There were 2,417 women resident in NELCN diagnosed with breast cancer between 2005 and 2007. Pathology reports were found and matched for 1,538 (64%) of these women, and whether the patient had triple negative disease was determined for 1,228 (51%) women. Compared with White women, Black (OR=2.82,  $p<0.001$ ) and Asian (OR=1.81,  $p=0.043$ ) women with breast cancer were more likely to have triple negative disease.

**Conclusions**

Black and Asian women with breast cancer are more likely to be diagnosed with triple negative disease than White breast cancer patients. As this is a more aggressive disease, this finding may help to explain the higher proportion of Black women diagnosed with a more advanced stage. Further studies should explore the relationship between triple negative disease and age, tumour size, stage of disease at presentation and prognosis.