

Breast Cancer : Ethnicity

NCIN Data Briefing

Introduction

Ethnicity was available from the Hospital Episode Statistics (HES) dataset for 68% of the 41,482 patients (41,190 female, 292 male; 89% invasive, 11% non-invasive) diagnosed with breast cancer in England in 2006. Reported ethnicity, which is more likely to be recorded for surgically treated patients, was amalgamated into the broad groupings: "White", "Black", "Chinese", "Asian", "Mixed" and "Other".

Age at diagnosis and route of presentation

In patients known to be Black, the median age at diagnosis was younger, 50 years compared with 62 years for those known to be White (Table 1). In the screening invitation age group (50-70 years) 56.3% of women known to be White had screen-detected breast cancers compared with 52.1% of women known to be Asian and only 44.6% of women known to be Black.

Table 1: Age at diagnosis and route of presentation for breast cancers diagnosed in England in 2006 according to ethnicity

Ethnicity Grouping	Total cases		Age at diagnosis (Median, Interquartile Range)	Women aged 50-70	
	No.	%		No.	Screen-detected (%)
White	26,807	64.6%	62 (52-72)	14,500	56.3%
Asian	611	1.5%	55 (47-65)	359	52.1%
Black	428	1.0%	50 (43-63)	177	44.6%
Chinese	74	0.2%	53 (48-59)	43	53.5%
Mixed	97	0.2%	52 (43-67)	44	50.0%
Other Ethnicity	222	0.5%	55 (48-66)	122	57.4%
Unknown	13,243	31.9%	63 (53-77)	6,291	54.4%
All England	41,482	100%	62 (52-73)	21,536	55.6%

Tumour characteristics

Patients known to be Black were more likely to have high grade, node positive tumours. Grade was recorded for 93% of the 351 surgically treated invasive breast cancers in Black patients, and nodal status in 63% of these cases. Where data were known, 56% of tumours in Black patients were poor prognosis Grade 3 tumours and 64% had involved lymph nodes (Figure 1). In comparison, for patients known to be White, the proportions of Grade 3 and node positive cancers were lower, at 36% and 38% respectively.

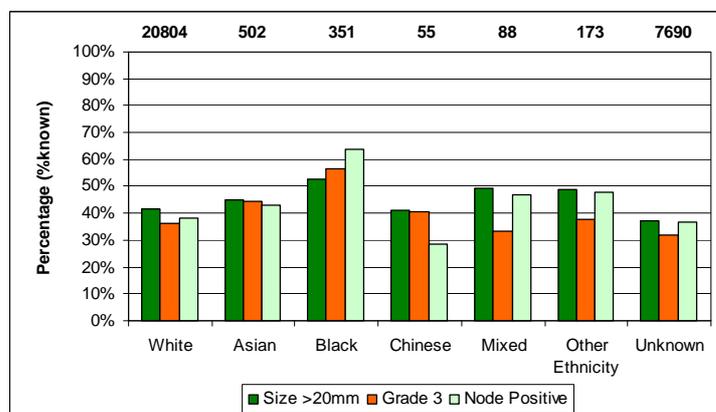


Figure 1: The proportion of surgically treated invasive cancers with poorer prognosis in terms of size, grade and nodal status

KEY MESSAGE:

There are ethnic variations in the age, route of presentation and tumour characteristics of breast cancer patients in England. Patients known to be Black are younger, less likely to be screen-detected and have worse prognosis tumours.

Tumour characteristics according to age at diagnosis and route of presentation

Patients aged 50-70 with screen-detected breast cancers displayed smaller differences in tumour characteristics according to ethnicity than symptomatic patients in the same age group (Figure 2).

27% of screen-detected cancers in patients known to be White and 25% of screen-detected cancers in patients known to be Black were Grade 1 tumours.

49% of breast cancer patients known to be Black diagnosed in 2006 were aged under 50 and, therefore, were diagnosed

before becoming eligible for breast screening. 62% of these patients had Grade 3 tumours (Figure 2) compared with 50% of women known to be White who were aged under 50 at diagnosis.

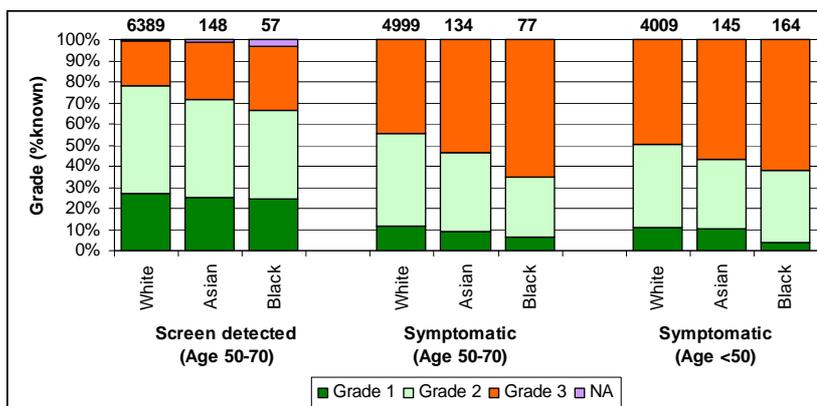


Figure 2: The grade of surgically treated invasive cancers according to age and route of presentation

Further Information

This data briefing is based on the All Breast Cancer Report "A UK analysis of all symptomatic and screen-detected breast cancers diagnosed in 2006" which includes detailed methodology, a list of data sources and references. Treatment data and adjuvant therapy data are available in this report.

The All Breast Cancer Report is available to download from the NCIN website www.ncin.org.uk, the NHS Breast Screening website www.cancerscreening.nhs.uk and the WMCIU website www.wmpho.org.uk/wmciu/.

This briefing is one of a series published on the main findings from the 2009 All Breast Cancer Report. Copies of the briefings on Ethnicity and the Elderly are available for download from the NCIN website.

The management of non-invasive breast disease is studied in the Sloane Project which is funded by the NHS Breast Screening Programme. More information can be found at www.sloaneproject.co.uk.

FIND OUT MORE:

West Midlands Cancer Intelligence Unit

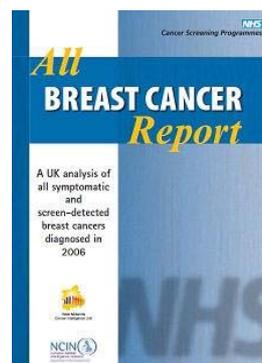
WMCIU is the National Cancer Intelligence Network lead cancer registry for breast cancer

<http://www.wmpho.org.uk/wmciu>

Other useful resources within the NCIN partnership:

Cancer Research UK CancerStats – Key facts and detailed statistics for health professionals

<http://info.cancerresearchuk.org/cancerstats/>



The NCIN is a UK-wide initiative, working closely with cancer services in England, Scotland, Wales and Northern Ireland, and the National Cancer Research Institute (NCRI), to drive improvements in standards of cancer care and clinical outcomes by improving and using the information it collects for analysis, publication and research. In England, the NCIN is part of the National Cancer Programme.