



Breast cancer and age in ethnic groups in South East England



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Objective

To examine whether there is a difference in the age at which Black Caribbean, Black African and White women are diagnosed with breast cancer that is unrelated to differences in the population age structures.

Methods

Records on female breast cancer cases resident in South East England who were diagnosed between 1998 and 2003 were extracted from the

Figure 1: Age distribution of female breast cancer cases, diagnosed 1998-2003, South East England, by ethnic group

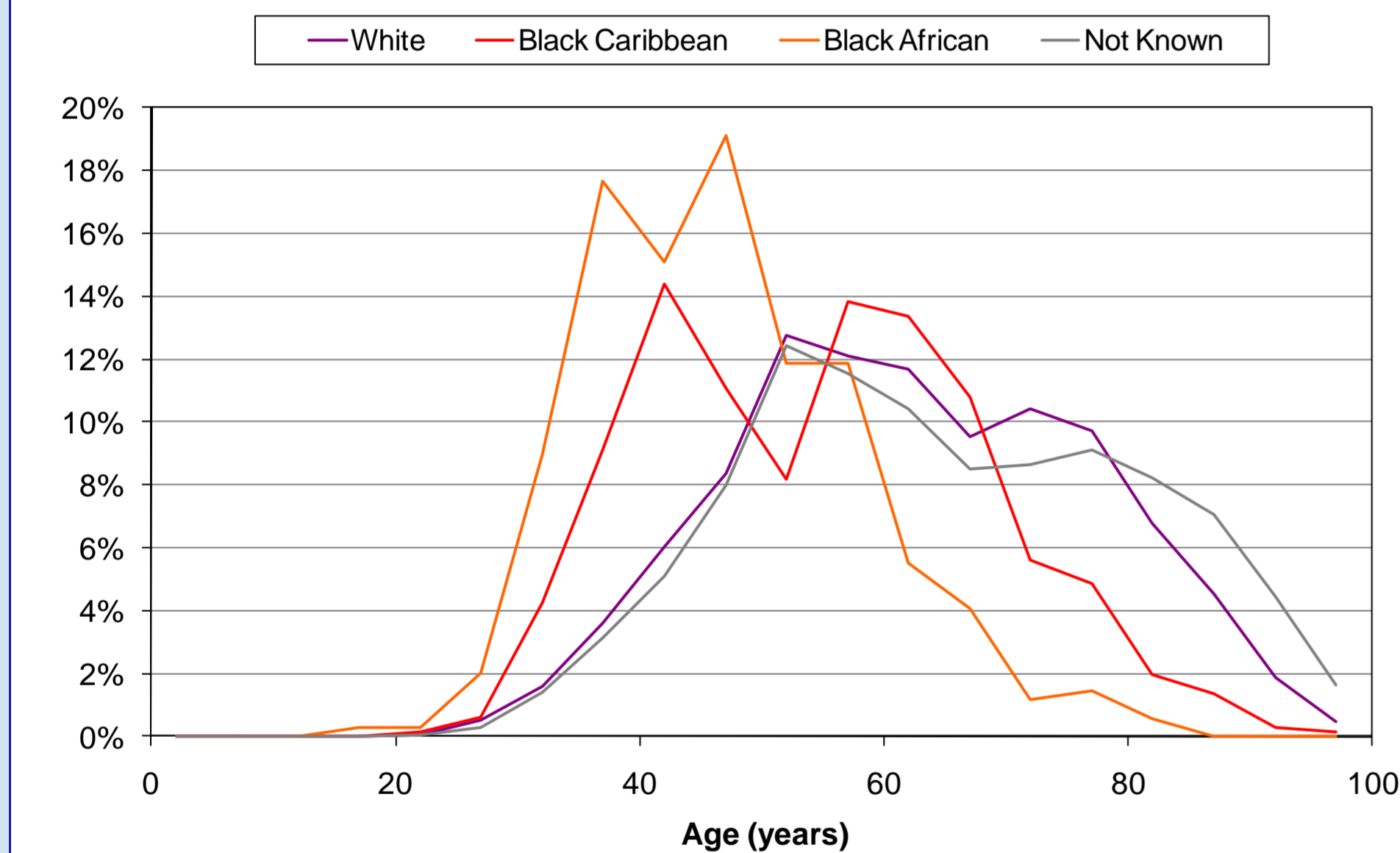
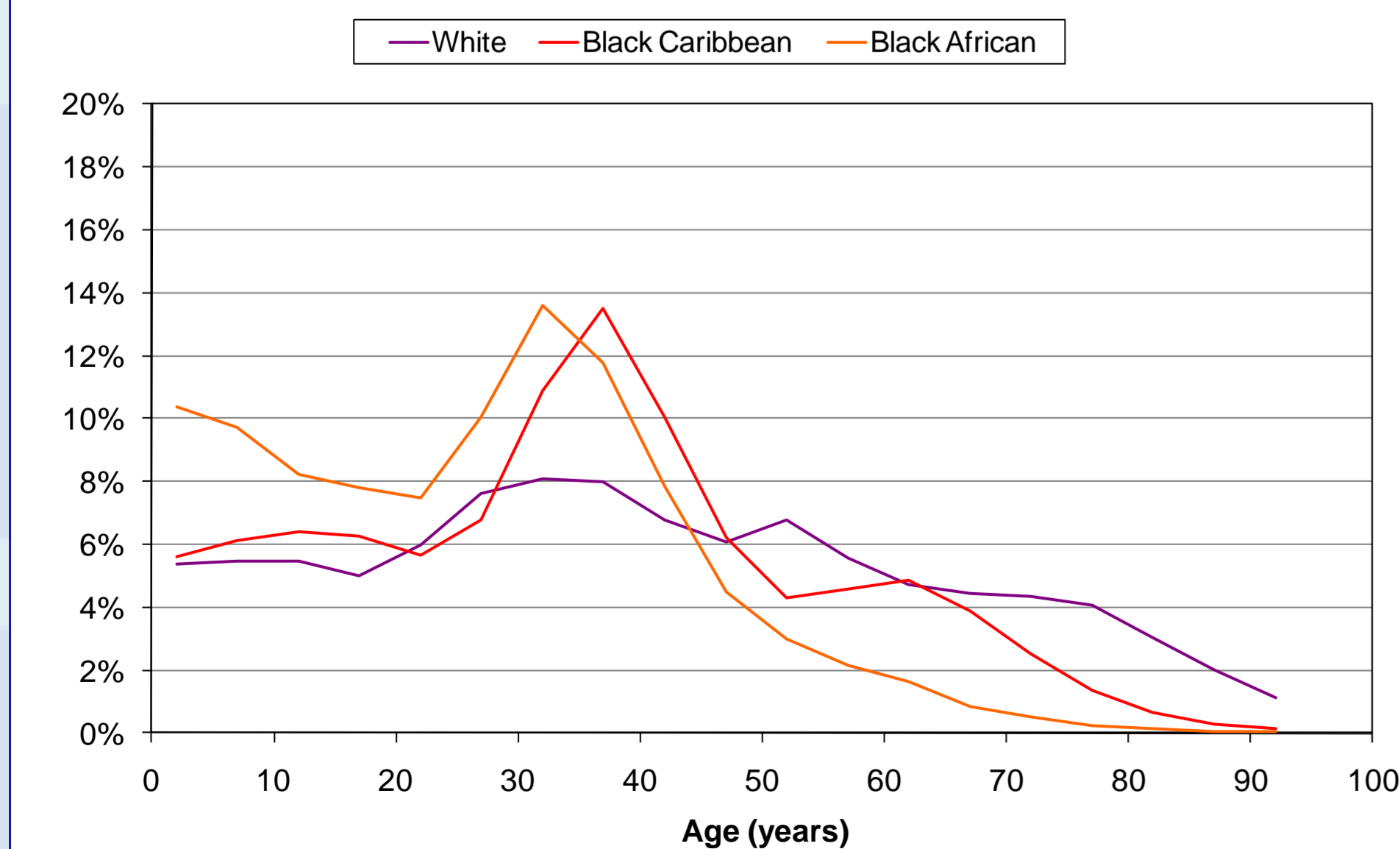


Figure 2: Age distribution of female population from 2001 Census, South East England, by ethnic group



Thames Cancer Registry database. Population data on female residents of the same area of South East England were obtained from the 2001 Census by ethnic group. Age-specific rates were calculated for each 5-year age group, and age-standardised incidence rate ratios (ASRR) were calculated for Black Caribbean and Black African women compared with the baseline of White women in 10-year age groups. The ASRRs are therefore the ratio of breast cancer incidence in Black Caribbean or Black African women compared with White women of the same age.

Results

Figure 1 shows the age distribution of the breast cancer patients in White, Black Caribbean and Black African ethnic groups, along with those patients who had missing ethnicity information. The Black Caribbean and Black African patients were younger than both the White patients and those with no ethnicity recorded.

The population age distribution (Figure 2) shows that in South East England Black Caribbean and Black African women have a younger age profile than White women. Table 1 compares the mean and median ages of women in different ethnic groups with breast cancer and in the population. The age differences between Black Caribbean and Black African women compared with White women are similar when examining the breast cancer patients and the overall population.

Table 1: Mean and median age (years) of female breast cancer cases diagnosed 1998-2003, and female population from 2001 Census, South East England, by ethnic group

Ethnic group	Breast cancer cases				Population			
	mean	Δ	median	Δ	mean	Δ	median	Δ
White	62		62		41		39	
Black Caribbean	55	7	55	7	35	6	35	4
Black African	47	15	46	16	27	14	28	11
Not Known	65	-2	63	-1	-		-	

Δ = difference from White group, rounded to 0 decimal places

The computed age-specific rates shown in Figure 3 are too low, as cases with missing ethnicity information did not have a corresponding population denominator. However, the computed rates in women aged under 50 were similar in the different ethnic groups. The ASRRs (Figure 4) show a very strong age effect in Black African women, with younger women having incidence rates more similar to White women of the same age. This is also seen in Black Caribbean women, although women aged 80 years and over have rates similar to White women.

Figure 3: Age-specific incidence rate per 100,000 of female breast cancer incidence, by ethnic group. Cases diagnosed 1998-2003, South East England

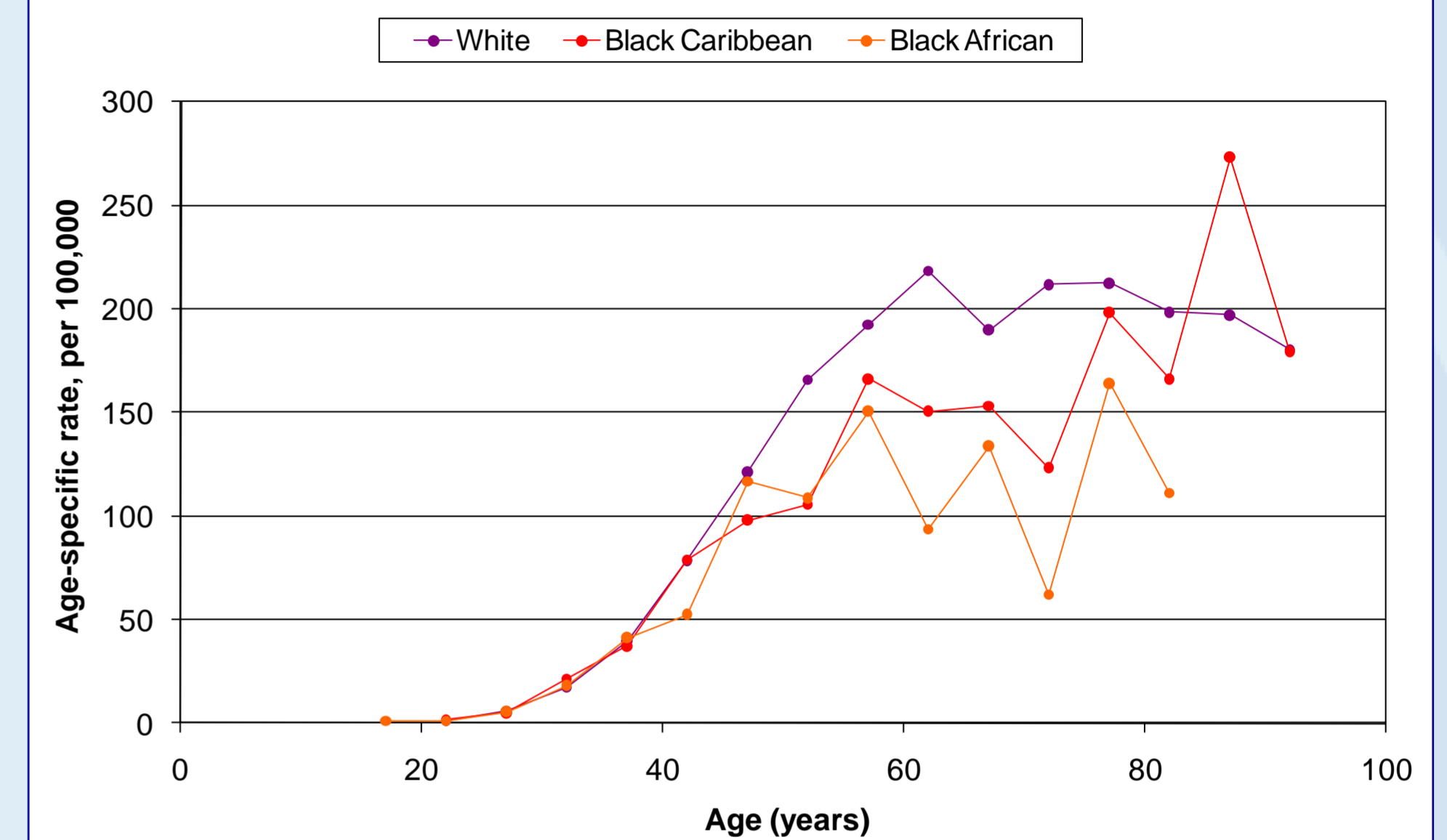
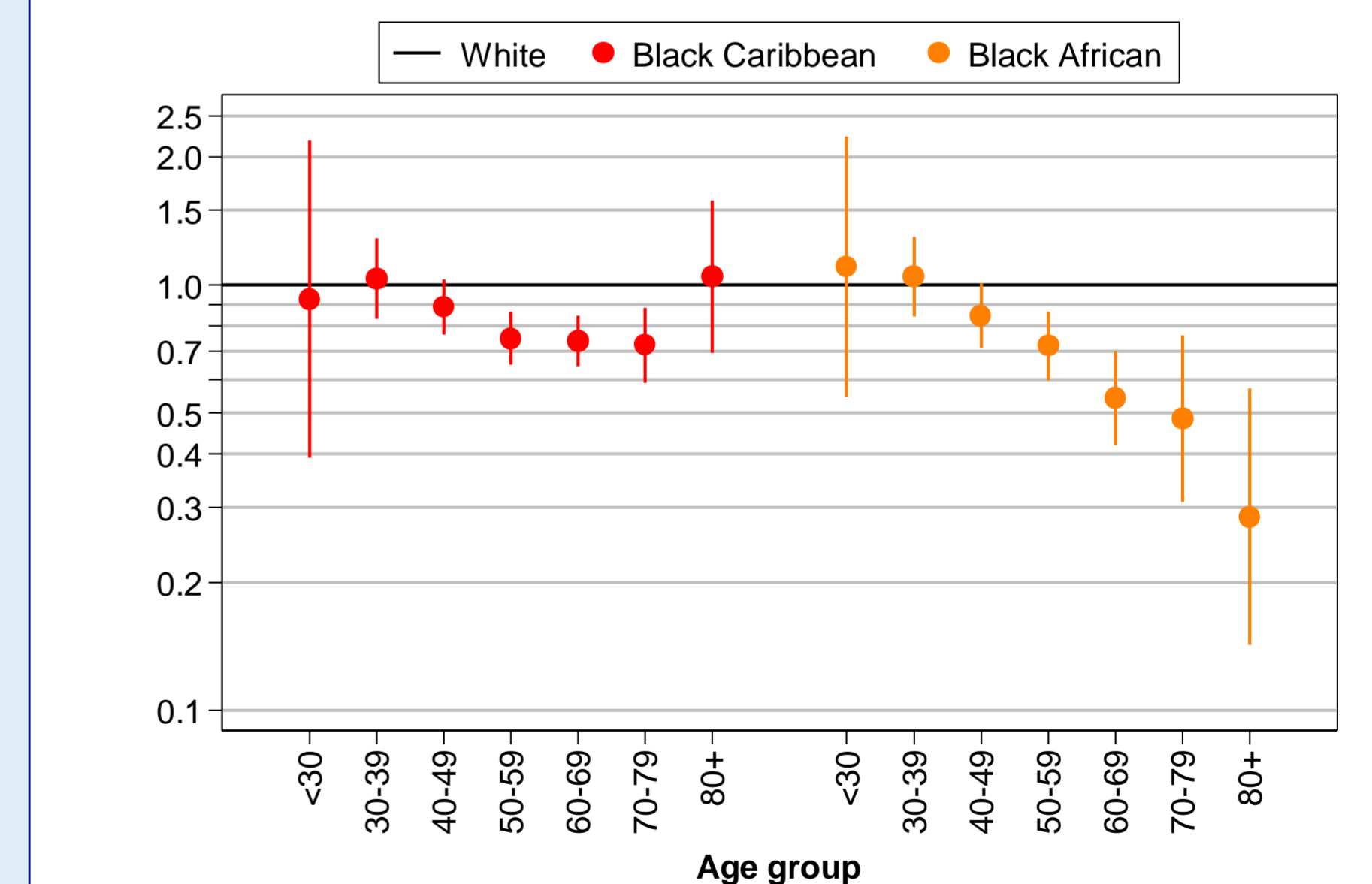


Figure 4: Age-standardised rate ratios (ASRR) and 95% confidence intervals for female breast cancer diagnosed 1998-2003, South East England, by age and ethnic group. White women as baseline



Conclusions

Breast cancer incidence rates are similar in Black Caribbean, Black African and White women aged under 50 years. The younger age of Black Caribbean and Black African breast cancer patients in South East England reflects the younger age of these populations rather than increased risk of disease at younger ages.