
New Findings presented in a Paris Meeting of statisticians and epidemiologists on September 7th.

The latest data on British female breast cancer, now the commonest of all cancers among women and men, provides the following new evidence that induced abortion is a significant factor for this disease.

The increased reverse gradient across social class.

Unlike other cancers, breast cancer is more prevalent among women in the higher social classes and this is called a “reverse gradient.” This reverse gradient across social class for breast cancer has become steeper in England as the Office for National Statistics (ONS) reported in Health Statistics Quarterly, Winter 2003. It is less steep in Scotland. The greater gradient in England can be attributed to the abortion rate, higher in England than in Scotland, in conjunction with a later Age at First birth among upper class women. Young upwardly mobile women tend to have abortions in their first pregnancies. And these « nulliparous » abortions are especially carcinogenic.

Using the model developed by London based research centre PAPRI, a further increase in the reverse gradient has been estimated for the next period of 4 years for England & Wales. See attached Figure A. Whereas ONS reported a Proportional Mortality Ratio for the highest social class of 169 for the years 1993-96 and 174 for the years 1997 to 2000, a further increase
in the Proportional Mortality Ratio to 179 for the Highest Social Class is now forecast for the years 2001 to 2004.

II The geographical variation across the British Isles shows a higher incidence of Breast Cancer in the South East.

The South East has a higher rate of incidence of breast cancer than other parts of the British Isles. [See Cancer Atlas of the UK and Ireland, ONS 2005 p 64.] This is explicable by the higher abortion rate in London and the South East (see attached Figure B). But it is not explained by the birth rate. Full term pregnancies are protective against breast cancer. London and the South East have a higher birth rate than the national average. Ireland has the lowest rate of breast cancer in the British Isles: 97 per 100,000 compared to 116 per 100,000 in the South East. [Cancer Atlas p 68] The lower rate of breast cancer in Ireland is also explicable by the lower abortion rate there.

III The increase in incidence.

The Office for National Statistics reported this year (ONS website): Breast cancer continued to account for 1 in 3 newly diagnosed cases of cancer in females. Between 1971 and 2002, the incidence rate for breast cancer (after adjustment for age) increased by around 70 per cent.

A correlational analysis made by PAPRI has shown that breast cancer incidence within ages 50 to 54 for successive birth cohorts of British women is highly correlated with cumulated cohort abortion incidence and less highly correlated with the numbers of children i.e. fertility of the cohort and other variables known to be important factors in female breast cancer.
such as age at first birth of women who have children and the proportion of women who are childless.

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The Future

Forecasts, using the PAPRI model, of the increased incidence of malignant breast cancers to be expected in Great Britain in the next 25 years are being presented in Paris on September 7th by PAPRI’s Director of Research, Patrick Carroll at the workshop of the EAPS (European Assocation for Population Studies) group on “Health morbidity and mortality”, hosted by the National Institute for demographic studies and the research unit “Mortality, health, epidemiology”. The workshop addresses the following issue: Patterns of morbidity and mortality by cause of death as a reflection of social inequality

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Figure A:

Female Breast Cancer Mortality. Proportional Mortality Ratios Showing Increased Reverse Gradient Across Social Class of Women. England and Wales

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Note: The six social classes are the highest Social Class I, Social Class II, Social Class III Non-Manual, Social Class III Manual, Social Class IV and Social Class V, the lowest social class.

Figure B:

Abortion Rates (per 1,000 women) in England & Wales and Thames regions in South East England and London


Note: 1. The areas governed by the health authorities in the South East of England have been redefined several times in the epoch considered. The South East from 1968 to 1973 included the Metropolitan area of London and the surrounding region. But since 1999 the South East covers the area outside the boundary of Greater London and not the Metropolitan area. The abortion rate is higher in this Metropolitan area of London. But at ages when they have children and later when they have Breast Cancer, residents of the South East tend to live outside the Metropolitan area.

Note: 2. Rates per 1,000 women calculated for women aged 15-49 for years 1968-1999 and for women aged 15-45 for years 2000-2003