An Analysis of Cancer Inequalities in London and the South East Coast SHAs

Vivian Mak, Ashu Sehgal, Daniela Tataru, Jagdip Kang, Henrik Møller

THAMES CANCER REGISTRY

KING'S College LONDON

This is part of a collaborative project involving the three cancer registries in southern England to explore inequalities in breast, colorectal, lung and prostate cancer in this area.

Objectives

To further understand cancer inequalities by assessing the data on General Practitioner (GP) referrals under the 2 weeks wait, cancer incidence, hospital admissions for cancer and, cancer treatment by sex, age, socio-economic deprivation and local authority area of residence in southern England.

To assess the inequalities in relation to female breast, colorectal, lung and prostate cancer in the London, South Central, South East Coast and South West Strategic Health Authorities.

Methods

Details of patients with cancer referred in 2007/08 were extracted from the Open Exeter cancer waiting time database. We used details of patients diagnosed between 2002 and 2006 from the cancer registration dataset to assess variations in cancer incidence. Details of patients admitted into hospital between 2002/03 and 2006/07 from the hospital episode statistics (HES) were used to evaluate variations in hospital admissions. These patients were assigned to socio-economic deprivation groups and local authority area of residence. The income domain of the Indices of Deprivation 2007 was used to classify the patients into the socio-economic deprivation groups.

We used maps and charts to present the variations in the proportions of patients referred by their GPs under the 2 weeks wait system, emergency admissions (under 75, 75 and above), variation in cancer incidence, all hospital admissions and proportions receiving any treatment.

Results

The results presented here focussed on specific findings on lung cancer, for both London and the South East Coast (SEC).

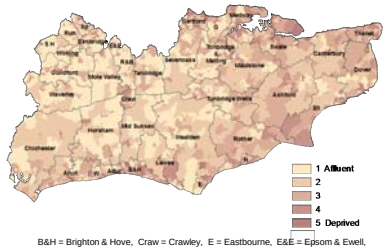
The maps in Figure 1 show the different areas of deprivation in (a) London and (b) SEC. The areas with darker shading represent more deprived areas while more affluent areas are shaded lighter. There are more deprived areas in London compared with SEC. Figure 2 presents the percentage of lung cancer patients with urgent referrals under the 2 weeks wait system. There are more patients with urgent referrals in the SEC (b) compared to those in London (a). A slightly higher proportion of males in both areas aged under 75 years old were referred as urgent compared to the older males. The proportions of GP urgent referrals vary across the socio-economic deprivation groups. The charts in Figure 3 show that there is a higher incidence of lung cancer in more deprived areas for males and females. The incidence of lung cancer in both these areas is higher in males than in females. Figure 4 shows that there are more hospital admissions for lung cancer in more deprived areas than in affluent areas for both males and females. More males are admitted into hospital for lung cancer than females. Figure 5 shows that the proportions of lung cancer patients receiving any treatment within 6 months of diagnosis were slightly lower in those from deprived areas.

Figure 1: Maps of London and the South East Coast highlighting areas of affluence and deprivation based on the income domain of the Indices of Deprivation 2007

a) London

B&D = Barking & Dagenham, CL = City of London, H&F = Hammersmith & Fulham, I = Islington, K&C = Kensington & Chelsea, K = Kingston upon Thames, L = Lambeth, R = Richmond upon Thames, S = Southwark, TH = Tower Hamlets, W = Westminster, WF = Waltham Forest

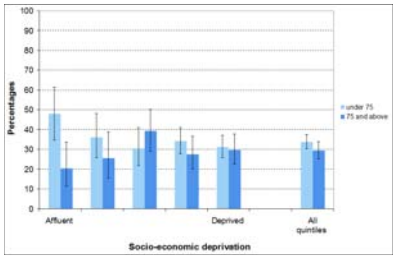
b) South East Coast



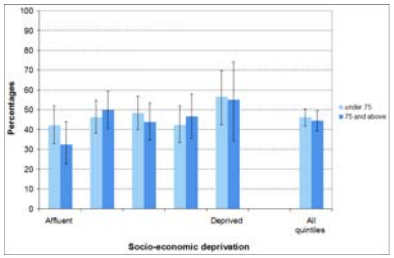
B&H = Brighton & Hove, Craw = Crawley, E = Eastbourne, E&E = Epsom & Ewell, G = Gravesham, H = Hastings, R&B = Reigate & Banstead, Run = Runnymede, Sh = Shepway, Sp = Spelthorne, S H = Surrey Heath, W = Worthing

Figure 2: General Practitioner (GP) referrals under 2 weeks wait system for lung cancer. Percentage with urgent referral, by socio-economic deprivation, sex and age (<75 & 75 & over), 2007/2008

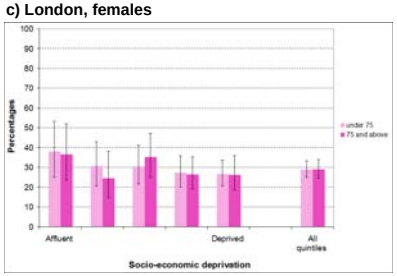
a) London, males



b) South East Coast, males



c) London, females



d) South East Coast, females

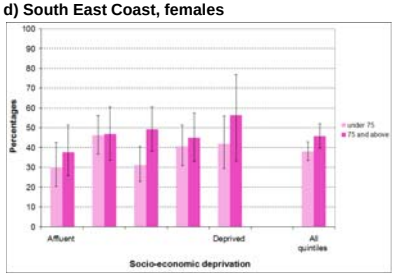
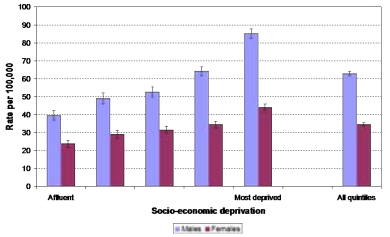


Figure 3: Incidence of lung cancer (incl. trachea and bronchus). Age-standardised incidence rates (ASR) (per 100,000 European population), by socio-economic deprivation and sex, 2002-2006

a) London



b) South East Coast

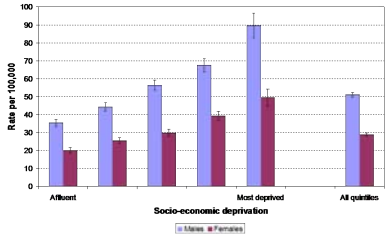
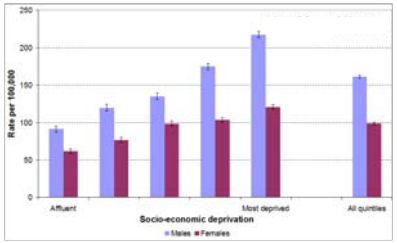


Figure 4: Hospital admissions for lung cancer
Age-standardised rates of admission to hospital, by socio-economic deprivation and sex, 2002/2003 to 2006/2007

a) London



b) South East Coast

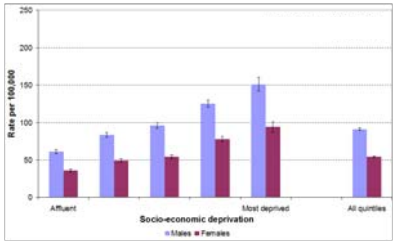
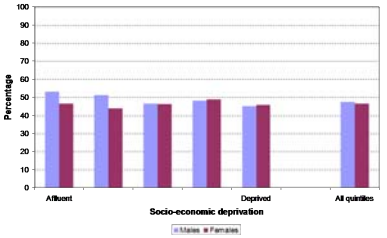
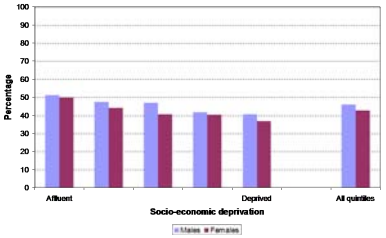


Figure 5: Percentage of patients with lung cancer receiving any treatment within 6 months of diagnosis, by socio-economic deprivation and sex, 2004-2006

a) London



b) South East Coast



Conclusions

The incidence of lung cancer is higher in males than in females. The incidence is higher in males and females from deprived areas. Our study uses various data sources to further understand the inequalities in the care pathway and the incidence of lung cancer in the London and South East Coast SHAs. We found that there are more patients in the South East Coast who were referred urgently under the 2 weeks wait, and that there are higher hospital admissions rates for patients from more deprived areas, in particular for males with lung cancer in London. These findings will inform policy makers, commissioners, managers and clinicians seeking to understand the impact of lung cancer on their local populations, and to decide on priorities for action.