Report on Cancer rates in Horwich and Blackrod

1. Introduction

At the January Meeting of the Health Overview and Scrutiny Committee the PCT was asked to investigate cancer rates in Horwich and Blackrod. This report summarises the findings of this investigation.

The cancer data analysed comes from cancer registrations made to the North West Cancer Registry. It covers the years 1981 to 2004.

2. Overall cancer incidence

Chart 1 shows the number of cancer cases each year since 1981 in Horwich and Blackrod. It shows that the number of cancer cases has gradually risen over the past 24 years. This reflects the national picture. Cancer is more common among older people, so as the population is ageing cancer incidence is increasing.

Chart 1 indicates that Horwich has consistently had a higher number of cancer cases than average for Bolton wards. However it is misleading to compare numbers of cancer cases at ward level, as wards have different numbers of people living in them and different age and sex structures. We can overcome this, to enable comparisons to be made, by standardising cancer incidence rates.

Chart 2 shows the standardised incidence rates for all cancers in Bolton, Horwich and Blackrod. This shows what the cancer rates would be if Bolton, Horwich and Blackrod all had exactly the same age and sex structure.

When we look at cancer incidence rates, the smaller the area we examine, the more fluctuation there is in the rates. This is because the relatively small numbers of cancers in electoral wards means that a small increase in the number of cancers can make a large difference to the rate. In order to interpret and compare rates in small areas more accurately, we calculate 95% confidence intervals. Chart 2 also shows 95% confidence intervals of the standardised rates. These indicate that we can be 95% certain that the true standardised rate falls within the range shown. On chart 2 the confidence intervals show that the overall cancer rates in Horwich and Blackrod are in line with the Bolton average.

3. Types of cancer affecting Horwich and Blackrod

The main types of cancer affecting Horwich and Blackrod are:

- Lung cancer
- Breast cancer
- Colorectal cancer
- Prostate cancer

This is in line with national statistics. Incidence of these cancers accounts for half of all of the cancer cases in Horwich and Blackrod.

A wide range of less common cancers make up the other 50% of cancer cases in Horwich and Blackrod.

4. Main causes of cancer in Horwich and Blackrod compared with Bolton Chart 3 shows trends in the age sex standardised rate of lung cancer incidence in Bolton, Horwich and Blackrod since 1981. This chart indicates that incidence of lung cancer seems to be reducing in all the areas shown. It also shows that incidence of lung cancer in Horwich and Blackrod is in line with Bolton.

Chart 4 shows trends in standardised rates of breast cancer. This indicates that incidence of breast cancer has been increasing overall, in line with the national situation. There are very large fluctuations in breast cancer rates in Horwich and Blackrod, with particular peaks in 1997 in Blackrod and 2003 in Horwich. However, even when these peaks occur the confidence intervals overlap with the rate in Bolton, indicating that these peaks are not statistically significant.

Chart 5 shows trends in standardised rates of colorectal cancer. This indicates that overall trends in colorectal cancer incidence have not changed since 1981. This is in line with the national trends, which show a small increase in incidence of colorectal cancer over the past 25 years. When we look at the incidence from year to year there are very large fluctuations in the rate in Horwich and Blackrod, however when the 95% confidence intervals are taken into account these fluctuations are not statistically significant.

Chart 6 shows trends in standardised rates of prostate cancer. This indicates that overall trends in prostate cancer have increased since 1981. This is in line with national trends. Prostate cancer has more than doubled nationally since 1981. There were peaks in incidence of prostate cancer in Horwich in 1993 and 1997, however when the confidence intervals are taken into account these are not statistically significant.

4. Conclusion

Over the years, the number of people in Horwich with cancer has been higher than the average for Bolton's electoral wards. This can be explained by the slightly older population in Horwich. When we look at age and sex standardised rates, it appears that cancer incidence in Horwich and Blackrod is in line with local and national trends.

Debs Harkins Public Health

22nd February 2007