National end of life care
INTELLIGENCE NETWORK

National End of Life Care Programme
Improving end of life care

Cause of Death in Cancer Patients. Exploring Trends Through the Use of Multiple Data Sets

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1. Introduction

Increasingly more people with a cancer diagnosis are dying from other causes of death, although people aged under 65 are most likely to die of the disease (Figure 1). This study summarises trends in deaths revealed through the use of three different data sources to determine if patients with a cancer diagnosis are more likely to die from certain causes than people without a diagnosis of cancer.

2. Methodology

The National Cancer Data Repository (NCDR) and Hospital Episode Statistics (HES) Mortality dataset associated with NCIN Cancer HES data, were linked to provide an estimate of the numbers of people with a cancer diagnosis (excluding people with only non-melanoma skin cancer). The Office for National Statistics (ONS) deaths data provided estimates of the total numbers of deaths through cancer compared to all deaths. All analysis included the years 2001 to 2008 for England.

3. Results

When the observed numbers of deaths for persons with a cancer diagnosis are compared to the expected number based on the total cohort of deaths from the same causes, it was found that deaths in patients with a cancer diagnosis were higher from diseases of the digestive and genitor-urinary system and lower for Alzheimer's, dementia and senility.

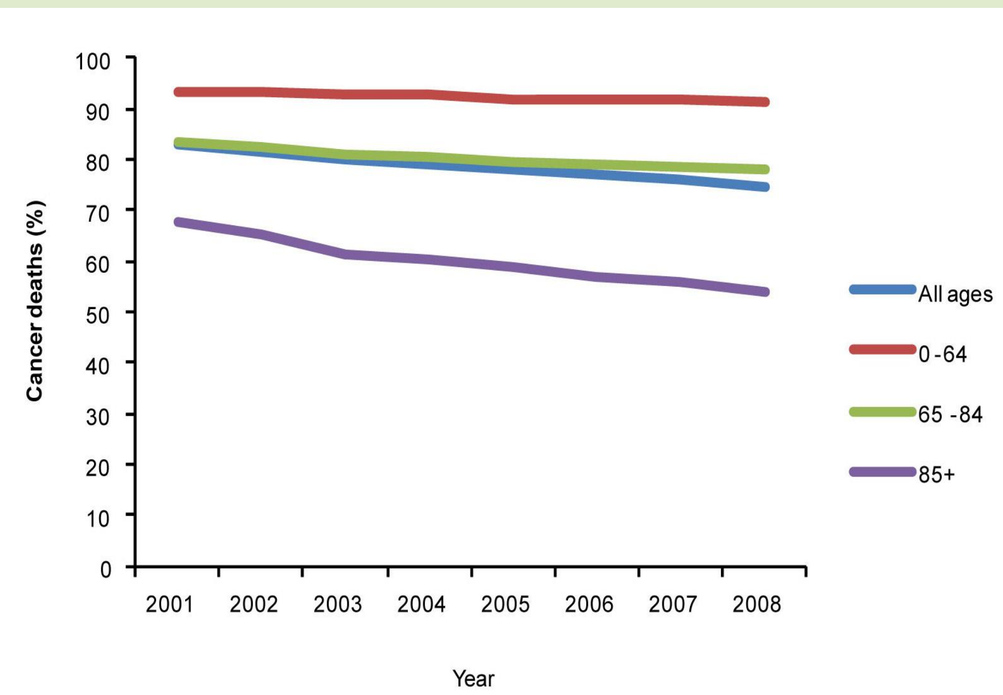
Deaths from respiratory disease were 50% higher in patients aged under 65 years with a cancer diagnosis compared to the rest of the population.

A comparison of the place of death (Figure 2) found that patients with a cancer diagnosis were more likely to die in a hospital or hospice and less likely to die at home or in a care home than the total population dying from causes other than cancer.

4. Conclusions

National Cancer Intelligence Network data broadly supports the much quoted “1 in 3 people are diagnosed with cancer, 1 in 4 die from cancer” which implies 75% of cancer patients will die of cancer. The mortality data linked through HES suggests that people with a cancer diagnosis who do not die of the disease, are more likely to die from certain conditions and in a hospital or hospice environment compared to the rest of the population.

Figure 1: Cancer deaths in England shown as a percentage of all deaths for persons diagnosed with cancer, between 2001 and 2008



Source: Hospital Episode Statistics and Office for National Statistics mortality files

Figure 2: Comparison by age group of the place of death for people with a cancer diagnosis dying from causes other than cancer and death in the total population from the same causes

Place of death	Age group 0-64	65-85	85+	Total
Care home (nursing or residential)	-0.2	-4.9	-8.8	-5.4
Home	-9.6	-4.3	-1	-4
Hospice	2.2	0.9	0.3	0.8
Hospital (acute or community, not psychiatric)	14.9	8.7	9.6	10.1
Other places	-7.3	-0.5	-0.1	-1.4

Note: A positive value indicates that cancer patients dying from causes other than cancer are more likely to die in the listed location compared to all deaths other than cancer.

Source: Hospital Episode Statistics and Office for National Statistics mortality files

NCIN national cancer intelligence network

www.endoflifecare-intelligence.org.uk

SOUTH WEST PUBLIC HEALTH OBSERVATORY