# Smoking among child cancer survivors highest in most at risk group

Posted on Wednesday 30th July 2008

Childhood cancer survivors who are most at risk of developing a second cancer are more likely to smoke than other childhood cancer survivors – reveals a University of Birmingham study published in the Journal of the National Cancer Institute* today.

The particular radiotherapy regimes and chemotherapy drugs used to treat children with Hodgkin's lymphoma**, soft tissue sarcomas or Wilms' tumour are known to put these children at an increased risk of developing further new cancers than most other childhood cancer survivors.

This study of more than 10,000 childhood survivors by researchers from the Centre for Childhood Cancer Survivor Studies at the University of Birmingham shows that smoking is most common in survivors of these three types of childhood cancer.

Overall, a smaller proportion of childhood cancer survivors smoke than in the general population.

Thanks to the development of better treatments for childhood cancer, nowadays almost eight in ten children survive a diagnosis of the disease and it is estimated that there are more than 26,000 survivors of childhood cancer alive in Britain today. It is therefore vital that the health of these people is followed up later in life to reduce the impact that the long term side effects of treatment for childhood cancer can have and to improve treatments for future generations.

The study included almost 2,500 survivors of Hodgkin's lymphoma, soft tissue sarcoma or Wilms' tumour.

Study author, Dr Clare Frobisher, said: "Although our results show that people who survived childhood cancer are less likely to smoke than the general population, it's clear that more work needs to be done to make sure they are aware of their increased risk of a second cancer and other related health problems if they smoke.

"It's worrying that those survivors who are most at risk of developing a new cancer as a result of their treatment, are more likely to be smokers than other childhood cancer survivors. We hope further research will show us the best ways to reach out to this group, helping them to stop smoking, and to discourage them from starting to smoke in the first place."

The majority of smokers in the study took up smoking before the age of 20.

Dr Frobisher continued: "We think intervention programmes should be put in place early, targeting cancer survivors as young as 12."

It is estimated that in the UK around 11 million adults – more than one in five of the population – smoke. Overall, survivors of childhood cancer are around half as likely as the general population to be regular smokers.

Director of the Centre for Childhood Cancer Survivor Studies – which is funded by Cancer Research UK – Professor Mike Hawkins, said: "We're very concerned that people who have been exposed to radiation and chemotherapy drugs during treatment for cancer as a child are exposing themselves to a further completely avoidable risk for developing another cancer and other smoking-related diseases*** in later life."

Researchers sent out questionnaires to people enrolled on the British Childhood Cancer Survivor Study (BCCSS) – the first national study of survivors of childhood cancer to be undertaken in Britain, funded by Cancer Research UK. The BCCSS follows up nearly 18,000 people who survived a diagnosis of cancer before the age of 15 between 1940 and 1991 throughout Britain.

Cancer Research UK's head of tobacco control, Elspeth Lee, said: "It's crucial that young people who've been through treatment for childhood cancer are given all the necessary information and support to discourage them from taking up smoking, and that appropriate and targeted stop smoking advice and medication is offered to those who have already started – especially those in these high risk groups.

"Children who have been through treatment for cancer are susceptible, like all other children, to taking up smoking. The tobacco industry tries to make its products attractive to young people, which is why we're calling for remaining forms of tobacco marketing, such as tobacco displays at the point of sale in stores, to be removed."

**ENDS**

For media enquiries please contact Ben Hill, Press Officer, University of Birmingham, Tel 0121 4145134, Mob 07789 921163

**Notes to editors:**

* Extent of smoking and age at initiation of smoking among adult survivors of childhood cancer in Britain. Frobisher et al. Journal of the National Cancer Institute. 2008.

** Children with Hodgkin's lymphoma are now only treated with radiotherapy if the disease is very localised, so only a small area is treated.

*** This is in addition to the other serious consequences of smoking including cardiovascular disease and chronic obstructive lung disease. We know already that chemotherapy drugs and radiotherapy increase the risk of both of these illnesses in survivors.

People who were diagnosed with Hodgkin's lymphoma or Wilms' tumour during childhood were over two and a half times more likely to be a regular smoker than survivors of brain cancer.

People who had heritable retinoblastoma, a rare form of eye cancer, or brain cancer were least likely to smoke.

**Smoking and risk of lung cancer**

Smoking is the single biggest preventable cause of cancer in the UK. It is responsible for nearly nine out of ten cases of lung cancer in the UK, with smokers overall 26 times more likely than non-smokers to develop the disease.

Half of all smokers eventually die from lung cancer or another smoking-related illness. And a quarter of smokers die in middle age – between 35 and 69.

The good news is that most of these deaths are preventable by giving up smoking in time.

The best way to reduce the risk of cancer is to give up smoking completely.

**About the University of Birmingham**

The University of Birmingham has around 27,000 students and 6,000 members of staff and a turnover of £360 million.

**University Medical School**

- The School has been delivering medical education for more than 180 years.
- The School has doubled its intake of medical students over the last five years.
- Over 85% of students stay in the area in which they trained, once they have qualified.
- The School of Medicine teaching links with sixty-five general practices and sixteen teaching hospitals.
- All sixteen teaching hospitals and an increasing number of teaching General Practices are linked to the University by a broadband IT virtual campus.

**About Cancer Research UK**

Together with its partners and supporters, Cancer Research UK's vision is to beat cancer.

Cancer Research UK carries out world-class research to improve understanding of the disease and find out how to prevent, diagnose and treat different kinds of cancer.

Cancer Research UK ensures that its findings are used to improve the lives of all cancer patients.

Cancer Research UK helps people to understand cancer, the progress that is being made and the choices each person can make.

Cancer Research UK works in partnership with others to achieve the greatest impact in the global fight against cancer.

For further information about Cancer Research UK's work or to find out how to support the charity, please call 020 7121 6699 or visit our homepage.



© University of Birmingham 2015