

No increase in brain tumours in the Nordic countries

January 18 2012

(Medical Xpress) -- The incidence of glioma - the most common form of brain tumour - is not increasing in the Nordic countries, contradicting the claim that mobile phone use is a cause of the disease. This according to a new study from Karolinska Institutet published in the scientific journal *Epidemiology*. The analyses presented by the researchers also show that the increased risks previously reported to be associated with mobile telephony in a few individual studies should have been observable in the general cancer statistics if mobile phone use had indeed been associated with a true risk increase.

"People living in the Nordic countries were quick to adopt [mobile phone technology](#) and mobile phones have been used by a very large percentage of the population," says Professor Maria Feychting of the Institute of [Environmental Medicine](#) at Karolinska Institutet. "All Nordic countries have cancer registries of a very high quality, which provide excellent opportunities for studying changes in the incidence of brain tumours."

The present study shows that there has been no increase in glioma in the Nordic countries since the introduction of mobile phones, and that the risk increases reported in a few individual studies are inconsistent with the cancer statistics. The paper is an update of a previous study on the incidence of glioma in the [Nordic countries](#). The analyses now cover the years up to 2008 and still show no sign of an increase in the disease in the age groups that have been using mobile phones.

The researchers also analyse how likely it is that a potential risk increase

associated with [mobile telephony](#) would be detectable in the Nordic cancer statistics. Their results show that the increased risks reported in a few studies would definitely have been seen in the statistics if such risk increases were real. The increased risk reported among the approximately ten per cent heaviest [mobile phone users](#) (>1,640 hours total use) in the Interphone study would have been observed in the cancer statistics with a 98 per cent probability. Since no upward trend was found in the cancer statistics, it strongly challenges the validity of the increased risks reported in a few studies, the researchers conclude.

"However, these analyses do not give information about potential risk increases after 20 or 30 years or longer, which makes it necessary to continue to monitor brain tumor incidence trends in cancer registries" says Professor Feychting. "The WHO, EU and other bodies have recommended that this type of trend analysis of national cancer data be conducted and compared with changes in mobile phone use; other types of study designs have been shown to have major methodological problems and need to be complemented with such trend analyses."

More information: Isabelle Deltour, Anssi Auvinen, Maria Feychting, Christoffer Johansen, Lars Klaeboe, Risto Sankila & Joachim Schüz, Mobile Phone Use and Incidence of Glioma in the Nordic Countries 1979-2008, *Epidemiology*, online 16 January 2012, [doi: 10.1097/EDE.0b013e3182448295](#), paper issue Vol. 23, Nr 2, March 2012.

Provided by Karolinska Institutet

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