

People with asthma most at risk from H1N1 complications

Oliver Ellis *BMJ*

The government has released further information on the underlying conditions that can cause swine flu to become more dangerous, showing that asthma is the most common comorbidity found in those who are admitted to hospital.

The figures come from a study conducted by the Flu Clinical Information Network (FLU-CIN) and funded by the Department of Health, which looked at a sample of 192 patients in England who had been hospitalised with the H1N1 virus. It found that lung disease was the most common underlying condition, with more than 25% of those admitted having asthma. Cardiac disease was present in 15% of patients admitted to hospital.

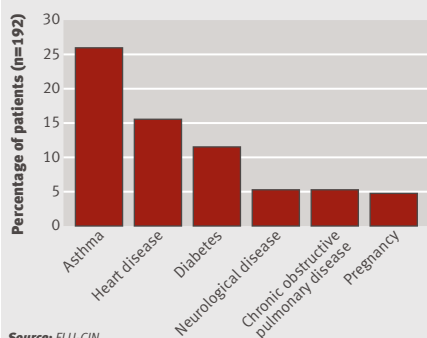
England's chief medical officer, Liam Donaldson, noted that pregnant women made up 5% of hospitalised patients who had a diagnosis of swine flu, a "small but significant proportion."

The figures also underline the dangers of swine flu to previously healthy young people. Although older people with complications resulting from swine flu often had underlying conditions, half of the 80 people aged 16-44 years and 35 of the 40 children aged under 5 years who needed hospital treatment had no known comorbidities.

Cher Piddock, lead asthma nurse at Asthma UK, said that advice to people with asthma was to be vaccinated against swine vaccine as soon as possible and to keep their condition under control. She said, "They can do this by using their preventer inhaler as prescribed, [and by] seeing their doctor or asthma nurse for an asthma review."

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UNDERLYING CONDITIONS IN 192 HOSPITALISED PATIENTS IN ENGLAND WITH CONFIRMED SWINE FLU



Teenager who died after HPV vaccine had a chest tumour

Adrian O'Dowd *LONDON*

An English teenager who died shortly after receiving the human papilloma-virus (HPV) vaccine Cervarix had a large malignant tumour in her chest, which caused her death, public health doctors have said.

A pathologist confirmed on 1 October that results of a post mortem examination into the death of 14 year old Natalie Morton from Coventry found a tumour of unknown origin in her heart and lungs.

There was no indication that the HPV vaccine contributed to her death, "which could have arisen at any point," said Caron Grainger, joint director of public health for NHS Coventry and Coventry City Council.

The pupil of Coventry Blue Coat Church of England School and Music College was given the HPV vaccine on 28 September as part of routine vaccination against cervical cancer,



Natalie Morton died on 28 September

but she died a few hours later.

NHS Coventry quarantined the batch of vaccine used as a precautionary measure and informed the Medicines and Healthcare Products Regulatory Agency.

A spokesman for the Department of Health said that although it was asking the NHS to quarantine all stocks of HPV vaccine from the batch related to this case, the

national vaccination programme should continue.

Dr Grainger added, "We hope that this news will reassure parents that the vaccine is safe and that they should continue to encourage their daughters to be protected against cervical cancer. The HPV vaccination programme will continue as planned in the city from Monday."

See **OBSERVATIONS**, p 836

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Tributes to Natalie Morton from pupils at Blue Coat Church of England School in Coventry

Coroner rules that treating 26 year old

Clare Dyer *BMJ*

A 26 year old woman who swallowed antifreeze and died after doctors refused to carry out lifesaving treatment against her wishes had refused the treatment "in full knowledge of the consequences and died as a result," a coroner has ruled.

Some UK media outlets reported that doctors had been

forced to let Kerrie Wooltorton, from Norwich, die because she arrived at hospital brandishing a living will.

However, she arrived fully conscious by ambulance and was deemed mentally competent and therefore by law entitled to refuse medical treatment.

Had she lapsed into unconsciousness before she

was seen by doctors the living will or advance directive would have come into play to make her intentions clear and stop doctors intervening to save her life.

In a narrative verdict, the Norfolk coroner William Armstrong said that Ms Wooltorton had capacity to consent to treatment, which, more likely than not, would have

MEDICINE AND THE MEDIA

Cervarix: not the new MMR

The UK press may have learnt lessons from the MMR furore, though this hasn't stopped some papers from sensationalist stories about the HPV vaccines, writes **Rebecca Coombes**

We have known for more than a week that the Cervarix vaccine did not kill 14 year old Natalie Morton (*BMJ* 2009;339:b4032). But the sad death of the Coventry schoolgirl shortly after receiving the human papillomavirus (HPV) vaccine on 28 September presented a difficult test to the press in the United Kingdom.

The story had some of the hallmarks of the furore over the measles, mumps, and rubella (MMR) vaccine—a health scare also concerning a vaccine with a previously excellent safety record. Journalists had their fingers burnt over MMR, when they gave credence to the maverick doctor Andrew Wakefield and his later retracted evidence that the MMR vaccine might trigger autism. Perhaps wary of charges of gullibility, initial reports of Natalie Morton's death were restrained. "Don't panic" ran the *Daily Mirror* headline. Science friendly media agencies, such as the Science Media Centre, successfully fielded questions from the press and provided expert quotations.

The story moved quickly: on 1 October preliminary reports showed that Natalie had a large malignant tumour in her chest, which had caused her death. But some news desks were unable to shake the scent of a different story. On 4 October, in headline letters several inches high, the *Sunday Express* declared the "Jab 'as deadly as the cancer.'" These words were attributed to Diane Harper, who has been involved in clinical trials of GlaxoSmithKline's Cervarix and Merck's Gardasil.

Speaking to the *BMJ*, Harper, professor of obstetrics and gynaecology, community and family medicine, and bioinformatics and personalised

medicine at University of Missouri-Kansas City School of Medicine, said that she was extremely unhappy at the "horrible misconstruction" of her statements.

"I was not accurately quoted in either the *Daily Mail* or the *Sunday Express*," she said. "I never said that the 'jab was as deadly as the cancer,'

nor was the interview exclusive [as was claimed]. The journalists did not reveal the autopsy results of Natalie Morton at the time of the interview, leaving the statement that she died after her injection—

without clearing any inferences that the injection was the cause of her death, which we now know is clearly not the case."

Although Harper has reservations about the delivery of the mass HPV vaccination campaign, she is satisfied with the safety record of both vaccines. "The evidence base is quite adequate for both vaccines. The evidence for Gardasil does show a very small risk of adverse events. Both vaccines are in general safe for most women."

If the *Sunday Express* story was simply out and out inaccurate, minor errors elsewhere were also creating problems. These included reports directly after Natalie Morton's death that the whole HPV vaccination campaign had been suspended in the UK. This was not true; instead there was a delay in getting replacement supplies of Cervarix after the batch that included the vaccine used on the 14 year old was quarantined as a precaution.

However, Tom Sheldon, of the Science Media Centre, writing in the *Guardian*, defended the right of journalists to ask questions. "Local radio stations have been inundated with emails from worried parents, some questioning whether to allow their daughters to have the vaccine. And it was natural to wonder whether the vaccine had anything to do with Natalie's death. Who wouldn't ask questions? That is the job of journalists, and to address the possibility of a link was legitimate."

But this was never going to be the next MMR, says Sheldon. "[Anti-vaccination] campaigners got barely a sniff of the action. We have learnt too many lessons from last time. Responsible, cautious scientists were everywhere this week, offering measured, evidence based information."

This measured tone didn't filter through to the review section in the *Sunday Times* of 4 October, in Rosie Millard's 1000 word feature entitled "What has this jab done to our girls?" The former arts correspondent spoke to families involved in a class action suit against GlaxoSmithKline. The parents claim that their children had an adverse reaction to the HPV vaccine. The feature began ominously: "A year ago Rebecca Ramagge was a happy, sporty teenager. Today she's a 13 year old crippled with chronic fatigue syndrome who has been laid up in bed for seven months."

Although Natalie Morton died from a tumour, not the vaccine, said Millard's article, "privately some NHS doctors are of the view that the injection might well have been a catalyst." A sceptical GP quoted in the article was not a vaccination expert but the journalist's brother. "A giant vaccination programme is the sort of tacit agreement that



Sunday Times coverage of Natalie Morton's death

sexual activity for teenage girls is all right," said Richard Millard.

The GP, writer, and broadcaster Phil Hammond is not surprised at some of the more over the top coverage but questions why the government wasn't quicker off the mark.

"The only way to counter scare stories is to have charismatic communicators to shoot them down quickly. Andy Burnham should have led the charge with the HPV vaccine but has been slow out of the blocks."

Hammond also questioned why the government didn't quash any conspiracy theories and publish the assessments it made of the two HPV vaccines. "If you don't publish in full why you made a particular decision at the time, it smells as if you're trying to conceal something. The Tories have made some capital out of this, as well as the press."

No evidence exists that Gardasil is any safer than Cervarix. An article in *JAMA* in August (2009;302:781-6) reported the results of safety surveillance in the first two and a half years since Gardasil hit the market and found 32 unconfirmed deaths. Two further deaths have occurred in Europe, one in Germany and in Austria. The main difference between the two vaccines is that Gardasil also protects against most forms of genital warts. It is also more expensive.

But some press stories suggested that cheaper also meant less safe, in the case of Cervarix. Amanda Platell wrote in the *Daily Mail*: "The tragedy of [Morton's] death highlights the scandal that this government went for [the] cheapest option." It was a line the *Daily Mail* had been peddling all week. Two days after Natalie Morton's death, the paper's columnist Allison Pearson stormed: "Why were we not told a deluxe version was available?"

But amid the more hot headed comments, Tom Sheldon is keen to emphasise how far health journalists have come since the MMR scare. In fact, he says, the "most frightening pieces of [anti-vaccination] rhetoric" he'd come across was from a doctor, Richard Halvorsen, in the *Daily Mail*, and not a journalist.

Says Sheldon: "I know of one health journalist who argued vociferously on Wednesday to stop her editors splashing with 'Ban this killer vaccine.' Google this headline and see who won."

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