An earlier version of this article was published on 17th December 2013 in the e-magazine nhsManagers.net see http://origin.library.constantcontact.com/download/get/file/1102665899193-1421/I+spy+with+my+little+eye.pdf This has been subsequently updated.

The NHS's best kept secret

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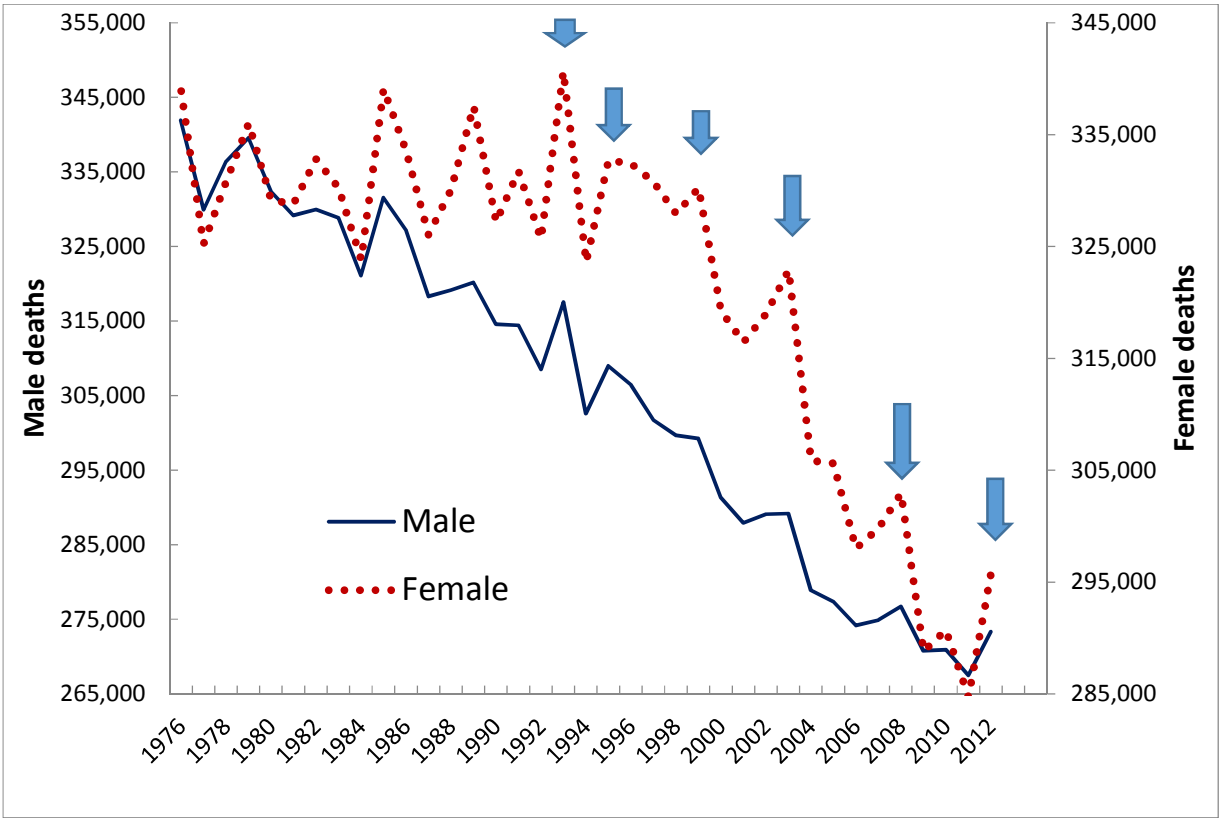
Have you ever wondered why the NHS seems to lurch from one funding crises to the next? A series of three research papers about to be published in Biomedicine International may shed crucial light on this issue in a rather unexpected way. It would appear that the crises seem to be initiated by outbreaks of a new type of infectious immune disease/impairment (note that AIDS is an example of a specific type of immune impairment). To gain insight into these very relevant issues a perusal of Figure 1 may be helpful.

Figure 1: Deaths in the UK by gender, 1976 to 2012



Data is from Office for National Statistics (ONS)

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Can you spot the infectious outbreaks? As they say you don't need to be Albert Einstein to answer that question. They are almost certainly present before 1993 but are intertwined with large influenza outbreaks.

It is clearly evident that more women die than men and soon to be published research shows that these outbreaks coincide with a lower proportion of live female babies while the period just before the outbreak is associated with lower proportions of male births. There appears to be a possible association with still births however this was not published since the numbers are too small to allow statistically significant conclusions to be drawn.

Each outbreak appears to commence slightly earlier in Scotland and shows spread across the UK which could only arise from a genuine infectious agent. Particular conditions, mainly related to immune mediated inflammation, are affected more than others and attendances at A&E and emergency medical admissions to hospital are greatly increased, hence the A&E crisis which commenced in 2012, i.e. before the outbreak hospital bed occupancy and A&E staffing were already at crisis point and the outbreak merely provided the tipping point.

Note the size of the two peaks in 2003 and 2008 which are of identical magnitude to that previously associated with international influenza outbreaks, although occurring at a time when international levels of influenza activity were at a 100 year minimum, namely between 2000 through to late 2009. To provide some perspective note the tiny peak in deaths associated with the swine flu epidemic in late 2009 to early 2010.

The outbreak in 1999 is worthy of note since it appears to have been largely confined to Scotland and we need to know why this outbreak never progressed to the other parts of the UK.

The ubiquitous herpes virus, cytomegalovirus (CMV), may be involved in some way, either as cause or via opportunistic reactivation in response to another agent. In this respect in the early days of AIDS/HIV research CMV was suggested as a potential cause but it was later discovered that CMV was merely taking opportunistic advantage of the immune impairment afforded by the infection of essential immune CD4 T cells by HIV. A repeat of this scenario is possible. While each infection causes the spike in deaths seen in the figure it also seems to act to weaken the health of others such that the number of increase hospital and primary care visits far outweighs the increased deaths.

Regarding the possible interaction between the proposed outbreaks and influenza the following is a quote from a paper to be published in late 2013 in Biomedicine International.

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"A feature of note is the apparent change in the shape of the time trend for each outbreak from before 2000 to after. One possible cause is the fact that early in 2000 influenza activity declined to a 100 year minimum, an event which had only occurred previously from 1879 to 1889. Based on analysis of the 1996 outbreak in England this author concluded that there may be some degree of additive or synergistic interaction between the two infectious agents especially when the proposed outbreak occurs prior to an influenza outbreak. In this respect recent research has shown that those aged 65+ with the highest CMV antibody titre have over a 4-times lower response to influenza vaccination indicating impaired ability to withstand an influenza epidemic and other research indicates that CMV induced immune changes in the elderly may be responsible for delayed clearance of the influenza virus from the lung. The presence of CMV has also been shown to alter the response of chronic hepatitis-C-virus infected patients to interferon-based therapy. CMV DNA was detected in 90% of interferon non-respondents versus 35% of responders. Patients with reactivated CMV has higher fibrosis scores (73% vs 24% for those with undetectable CMV DNA) and patients with high CMV DNA had higher rates of relapse 80% versus 19%. The immune response to a dual CMV and EBV infection in the elderly is also affected. CMV expansion of CD8 T cells occurs in the elderly with a specific reduction in effector function which is specific to EBV (but not influenza). It would therefore appear that such synergistic effects are indeed possible."

Since the dying usually end up in hospital prior to ultimate decease and the multiplying effect against health in other members of the population (and continued hospital admission after the effect upon deaths has declined) it should come as no surprise that each outbreak adds around £6 billion of costs into the NHS in England. What is so sad is that the NHS is being kicked and pilloried by politicians for something over which they have absolutely no control.

Privatisation (of the English NHS) and supposed free market efficiencies are futile attempts to manage a huge public health problem. Is no one at the top even remotely interested?

Copies of all supporting research are available at www.hcaf.biz in the 'Emergency Admissions', 'Hospital Beds' and 'Financial Risk' web pages.