

Winter mortality, CCG overspends, A&E attendances and general NHS mayhem

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In 2002/3, 2007/8 and again in 2012 some 25 600, 14 700 and 22 600 respectively unexpected and unexplained deaths had occurred [1-2]. This level of deaths only occurs during a large influenza epidemic; however, on all three occasions there was no influenza epidemic to explain the deaths.

Many will be aware that I have been publishing evidence during the past four years to show that these are due to a recurring series of outbreaks of an agent which appears to act via an immune impairment. Should you be tempted to think that immune function is of little importance it may interest you to note that over 100 inflammatory conditions and another 100 autoimmune conditions emanate out of immune dysfunction [3]. Another set of conditions emanate out of vitamin D insufficiency leading to immune impairment and resulting hospitalization [4-5].

Such a condition may have been around for many years and was probably masked by regular and large influenza epidemics in the years prior to 2000 [6]. It is therefore of interest to note the conclusions from a study published in 1932 which investigated a 15 year time series commencing in 1917 covering 35 large US cities with around 25 million residents [7]. Namely, that conditions other than influenza and pneumonia were reported as the cause of death in 40% of cases for all the minor epidemics, 23% for the 1920 epidemic and 8% during the 1918-19 epidemic. Influenza and pneumonia as contributory but not primary cause only accounted for half the difference with the other half arising from heart diseases, nephritis, cerebral hemorrhage, diabetes, tuberculosis, bronchitis and puerperal (post-partum) conditions. In the 1918-19 and 1920

epidemics respiratory TB and puerperal conditions were more common (now controlled by immunization and antibiotics).

I have pointed out that the immune impairments created by the common herpes virus cytomegalovirus are recognized to create impaired immunity to influenza, reduced influenza clearance from the lungs and impaired immunity to other infections [8]. The systematic review by Rafailidis et al [9] identified increasing mortality from CMV in cases of hospital admission in immunocompetent adults as did a study of 209,695 critically ill adults in the USA [10].

CMV can be regarded as the equivalent to the Emperor Palpatine in the Star Wars series [11]. Outwardly innocuous, but furtively manipulating far and wide [3,6,12]. This of course begs the question as to how much of the 1932 study was due to influenza *per se*, rather than influenza riding on the back of immune impairments created by CMV and other agents.

So how does this relate to winter mortality, the A&E crisis and CCG overspends? The relationship arises from the fact that the mortality is only the tip of a far wider morbidity iceberg [3,6,12] affecting A&E attendance and medical admissions even after the peak in deaths has abated. The infectious agent (CMV??) has a curious pattern of slow spread across the entire UK which lasts for around 2 years after the initial outbreak commences in Scotland [8], hence, CCG overspends radiate out of the spread across the UK. For example, Bromsgrove experienced a very high increase in deaths in 2012 and was beset by A&E problems from very early in 2012 while parts of Cambridgeshire actually showed a reduction in deaths in 2012 but went on the experience A&E problems in 2013.

What is perhaps most disconcerting is that recent government reports on excess winter mortality by Public Health England and the Office for National Statistics have sought to explain away the outbreak as a winter mortality issue [13-15]. Could it be the case that these reports are factually correct but scientifically misleading? You were not informed that the 2012 increase in deaths lasted over 18 months, nor that the 'higher' levels of influenza activity were insufficient to cause the excess deaths. Periods of cold were alluded to but would require a winter of ice age proportions to kill that many people. The linkage with hospital

admissions and A&E attendances was ignored. Highly single-year-of-age specific changes in mortality in deaths (in preparation) and medical admissions [16-17] were either not recognized or not mentioned.

Do not take my research as the final word. Should you have an acquaintance in a CSU, CCG, University or Medical School please alert them to this research and perhaps point them in the right direction about acquiring the correct data to challenge my research and investigate these issues in more detail. Feel free to contact me should you require advice as to how best to analyse the data.

All background research is available at www.hcaf.biz

References

1. Jones R. *British Journal of Healthcare Management* 2012; 18(10): 539-548.
2. Jones R. *British Journal of Healthcare Management* 2013; 19(5): 248-253.
3. Jones R. *Epidemiology: Open access* 2013; 4(3): 137.
4. Quraishi S, et al. *PLoS one* 2013; 8(11): e81120
5. Ramagopalan S, et al. *BMC Medicine* 2013; 11: 171
6. Jones R. In *Hypotheses in Clinical Medicine, 2013*; pp 37-79, Eds M. Shoja, et al. New York: Nova Science Publishers Inc. Available from: http://www.hcaf.biz/2013/CMV_Read.pdf
7. Collins S. *Public Health Reports* 1932; 47(46): 2159-2179.
8. Jones R (2013) A recurring series of infectious-like events leading to excess deaths, emergency department attendances and medical admissions in Scotland. *Biomedicine International* 4(2 |): in press
9. Rafailidis P, et al. *Virology Journal* 2008; 5; 47
10. Miggins M, et al. *PLoS one* 2011; 6(4): e18890
11. <http://en.wikipedia.org/wiki/Palpatine>
12. Jones R. In *Infection and Autoimmunity*, Eds: N Rose, et al. Elsevier: Amsterdam. 2014: (in press)
13. <http://www.ons.gov.uk/ons/rel/subnational-health2/excess-winter-mortality-in-england-and-wales/2012-13--provisional--and-2011-12--final-/stb-ewm-12-13.html>
14. <https://www.gov.uk/government/publications/excess-winter-mortality-2012-to-2013>
15. Jones R. *British Journal of Healthcare Management* 2013; 19(12): 601-607.
16. Jones R. *Biomedicine International* 2014; 5(1): in press

17.Jones R. Unexpected and semi-permanent increase in emergency medical admissions: admission threshold or infectious-like spread? Submitted