Gender ratio and hospital admissions

Dr Rod Jones (ACMA)
Actuarial and Statistical Advisor
Healthcare Analysis & Forecasting, Camberley, Surrey
hcaf_rod@yahoo.co.uk

For further articles in this series please go to: www.hcaf.biz
Those who work in the NHS can use their Athens login to obtain copies at: www.bjhcm.co.uk

Key Words: hospital admissions, gender ratio, infectious outbreaks, GP Commissioning, health care costs, emergency admissions, general symptoms

A series of articles in BJHCM has suggested that the pattern in medical and mental health admissions and A&E attendances can be best understood in the context of a pattern of repeating outbreaks of a new kind of infectious disease (Jones 2009a,b, 2010a-j). It has also been suggested that an increase in the proportion of female admissions is a characteristic signature associated with these outbreaks (Jones 2010a,d,e).

Figure 1: Change in proportion of female admissions for general symptoms in New Zealand

Data kindly supplied by the NZ Ministry for Health
An edited version of this article appeared as; Jones (2010) Gender ratio and hospital admissions. British Journal of Healthcare Management 16(11): 541. Please use this to cite.

Figure 1 gives an example from New Zealand relating to admissions for general symptoms (ICD-9 diagnosis code 780). As can be seen three clear shifts can be seen in 1997/98, 2003/04 and 2008/09 which match the dates (for a full year effect) following proposed outbreaks in 1996, 2002 and 2007 seen in the UK. In the UK each outbreak appears to be particularly associated with an increase in general symptoms since clinicians are not looking for a disease which works via general immune function impairment (Jones 2009b, 2010h-j).

The interesting point is that the proportion of female admissions is drifting steadily upward over time and this may offer insight into the cumulative effects of the infectious outbreak and the unexplained increase in medical admissions over the past three decades.

If one may suggest, at the very least, health care is not behaving the way we have been told it is supposed to behave (Jones 2010k). Is it time for a realistic reappraisal of the evidence-base for the basis of the biological factors involved and their knock-on effects in cost behaviour?

References

Jones (2010a) Additional studies on the three to six year pattern in medical emergency admissionhttp://www.hcaf.biz/Recent/Additional_Studies.pdf
Jones R (2010b) Emergency preparedness. BJHCM 16 (2), 94-95.
Jones R (2010c) Forecasting demand. BJHCM 16(8), 392-393.
Jones R (2010d) Nature of health care costs and financial risk in commissioning. BJHCM 16(9), 424-430.
Jones R (2010e) Nature of health care costs and the HRG tariff. BJHCM 16(9), 451-452
Jones R (2010f) Forecasting emergency department attendances. BJHCM 16(10), 495-496
Jones R (2010g) Trends in Programme Budget expenditure. BJHCM 16(11), 518-526.
Jones R (2010h) Unexpected, periodic and permanent increase in medical inpatient care: man-made or new disease. Medical Hypotheses 74, 978-83
http://dx.doi.org/10.1016/j.mehy.2010.04.023