

We ignore confidence intervals at our peril

Sir,

According to one definition the 95% confidence interval signifies that '95% of the time the.... confidence intervals should contain the true value of the variable of interest' (Moore and McQuay, 2006).

For example, although comparison of aspirin *vs* placebo (dose range 50–1300 mg/day) in six trials showed that aspirin reduced the incidence of stroke by 22% (confidence interval 2–38%) in patients with a mean age of 70 years with non-valvular atrial fibrillation (Hart et al, 1999), the true effect might also be either a 2% or a 38% stroke reduction in elderly non-valvular atrial fibrillation patients, among whom 20–30% of strokes might be attributable to coexisting cerebrovascular disease rather than to cardiogenic embolism.

Likewise, the confidence intervals for 'fibrinolytic [therapy] better' were extremely wide in the bundle-branch block category of myocardial infarction patients (Fibrinolytic Therapy Trialists (FTT) Collaborative Group, 1994), accounting for the recent discovery (when percutaneous intervention became the standard of care for myocardial infarction) that the vast majority of left bundle-branch block patients with suspected myocardial infarction did not have thrombotic occlusion (Becker et al, 2013).

Oscar Jolobe

Retired Geriatrician

*C/o John Rylands University Library
Manchester M13 9PP*

Becker S, Chisholm G, Maeng M (2013) Positive predictive value of clinically suspected ST-segment elevation myocardial infarction using angiographic verification. *J Am Coll Cardiol* **112**: 923–7

Fibrinolytic Therapy Trialists (FTT) Collaborative Group (1994) Indications for fibrinolytic therapy in suspected acute myocardial infarction: Collaborative overview of early mortality and major morbidity results from all randomised trials of more than 1000 patients. *Lancet* **343**: 311–22

Hart RG, Benavente O, McBride R, Pearce LA (1999) Antithrombotic therapy to prevent stroke in patients with atrial fibrillation: A meta-analysis *Ann Intern Med* **131**: 492–501

Moore A, McQuay H (2006) Simple statistics. In: Moore A, McQuay H, eds. *Bandolier's Little Book of Making Sense of the Medical Evidence*. Oxford University Press, Oxford

The limitations of this concept involve skills and funding. First, a high level of skill in research, training and clinical practice in a multidisciplinary team is required, and second, only units that are totally independent of industry are possible, given the financial stakes entailed. Funding by a health or university system, with provision of an advanced university degree for the leadership of such a unit is one solution, with salaries similar to those of private industry. The author's unit has recently been structured along these principles (<http://patho-pro-garches.aphp.fr/>).

The development of this new concept of a translational unit in occupational health, with appropriate funding and resources, is an opportunity for public health that should be applied elsewhere.

Alexis Descatha

Professor

*Occupational Health Unit/EMS (Samu92)
University Hospital of West suburb of Paris
F92380 Garches*

France

(Alexis.Descatha@inserm.fr)

Woolf SH (2008) The meaning of translational research and why it matters. *JAMA* **299**: 211–13
World Health Organization (2007) Workers' health: global plan of action. www.who.int/occupational_health/WHO_health_assembly_en_web.pdf (accessed 28 September 2013)

Seeking guidance from the Collegiate Learning Assessment + for trainee doctor interviews

Sir,

Postgraduate interviews following foundation training seem to offer little in terms of holistic selection. Medical and surgical core posts rely on a fixed approach centred on discussion of a clinical scenario, portfolio review and ethical dilemma (Health Education Kent Surrey and Sussex, 2013; Royal College of Physicians, 2013). Most candidates are certain to volunteer a sensible answer to a clinical case taking into consideration their concurrent preparation for membership exams and there are only a handful of ethical scenarios that can be tested which can be rote learned to perfection. As for the portfolio review, completion of foun-

dation training requires such documentation to be finalized in its entirety making it nigh-on impossible for candidates to score badly in this domain. One can imagine therefore how challenging it may be to differentiate between candidates suitable for the job at hand.

In the USA and internationally, the Collegiate Learning Assessment + is being used at college or university level to assess the ability of students to analyse and evaluate information, solve problems, and communicate effectively (Council for Aid to Education, 2013a).

Its *raison d'être* is based on commissioned surveys (such as that conducted by Hart Research Associates (2013) on behalf of the Association of American Colleges and Universities), which suggest that employers want institutions of higher education to place more emphasis on intellectual and practical skills (Council for Aid to Education, 2013b).

It is certain that during training one will gain continued exposure to clinical cases and ethics, and maintain an ever-increasing portfolio. Therefore in order to prevent a generation of clones would it not seem sensible to assess our trainees on skills such as critical thinking and complex reasoning to name but a few. The chairman of Microsoft seems to think so (Council for Aid to Education, 2013b).

Neel Sharma

Honorary Clinical Lecturer

*Centre for Medical Education
Barts and the London School of Medicine
and Dentistry*

London E1 2AD

(n.sharma@qmul.ac.uk)

Council for Aid to Education (2013a) CLA+ Overview. <http://cae.org/performance-assessment/category/cla-overview/> (accessed 12 November 2013)

Council for Aid to Education (2013b) Introducing CLA+. http://cae.org/images/uploads/pdf/Introduction_to_CLA_Plus.pdf (accessed 12 November 2013)

Hart Research Associates (2013) It Takes More Than a Major: Employer Priorities for College Learning and Student Success. *Liberal Education* **99**(2) (www.aacu.org/liberaleducation/le-sp13/hartresearchassociates.cfm accessed 2 December 2013)

Health Education Kent Surrey and Sussex (2013) About Your Interview. www.surgeryrecruitment.nhs.uk/interview (accessed 12 November 2013)

Royal College of Physicians (2013) Interview structure & content. <http://ct1recruitment.org.uk/the-interview/interview-structure-and-content.html> (accessed 12 November 2013)