MINERVA
Send comments or suggest ideas to Minerva: minerva@bmj.com

“Golden lads and girls all must, as chimney sweepers, come to dust” sings the mourning Arviragus in Shakespeare’s Cymbeline. There is something about the early death of dust and soot covered sweeps that has haunted poets and epidemiologists for centuries. The science of occupational medicine and carcinogenesis began with Percival Pott’s description of a chimney sweep’s scrotal cancer in 1775, and William Blake wrote of his “little black thing among the snow, crying ‘weep! weep!’” in notes of woé!” in Songs of Experience a few years later. The latest study of the woes of chimney sweeps comes from Sweden (Occupational and Environmental Medicine 2013, doi:10.1136/oemed-2013-101371) and shows that they have a higher rate of myocardial infarction than can be accounted for by known risk factors. A suitable poem is surely called for.

In days gone by, a British general practitioner woken up in the middle of the night to be told of a child with earache might say, “Give her a good dose of Calpol and see me in the morning.” But what actually is a good dose of Calpol or paracetamol for children of various ages? It’s about the most basic question you could ask of doctors looking after children, but a Taiwanese study in BMC Pediatrics shows a wide variation in practice among paediatricians, primary care doctors, and otorhinolaryngologists (2013;13:64, doi:10.1186/1471-2431-13-64). Best just swallow your pride and look it up in the formulary.

Telemonitoring in chronic illness aims to improve clinical outcomes, reduce hospital admissions, and encourage patients’ self reliance. Some even hope that telemonitoring will sell gadgets abroad and improve the United Kingdom’s balance of payments. Alas, in chronic obstructive pulmonary disease, it often seems to achieve the opposite of what was intended. Minerva believes that the best way to determine what is happening to patients is to ask them, and she is often derided by those of a sternly quantitative bent for reading journals such as Patient Education and Counselling. In a qualitative study of patients with chronic obstructive pulmonary disease randomised to telemonitoring in Scotland, researchers found that for a substantial number of patients interviewed, telemonitoring tended to increase dependence on practitioner support (2013, doi:10.1016/j.pec.2013.04.003).

Heart failure is a life shortening syndrome, but some patients live with quite severe failure for many years while others drop dead suddenly in the earlier stages. In fact, “heart failure” covers a variety of conditions and trajectories, and we are only in the early stages of sorting them out. A helpful contribution comes from the Journal of Palliative Medicine, reporting an analysis of data from 386 patients with heart failure in their last year of life (2013, doi:10.1089/jpm.2012.0510). Using a score based on comorbidity alone, researchers could define five distinct trajectories and identify patients in need of palliative care with a useful degree of precision. Minerva has been told that at present, about 2% of patients dying from heart failure in the UK receive palliative care.

The ancients perceived that for the purposes of combat or sport, the presence of breasts put women at a considerable disadvantage. The sports bra came too late for the Amazons, and even today it has limitations for women who choose to run hard for long distances. In a survey of 1397 female runners in the 2012 London marathon, 32% of participants reported having mastalgia (British Journal of Sports Medicine 2013, doi:10.1136/bjsports-2013-092175). The breast pain was significantly related to cup size and was greater during vigorous than moderate physical activity.

Stuck for life in a matrix of bone, osteocytes may seem rather dull fellows compared with the neurons that fire off messages in all directions, change connections all the time, and generally behave like hyperactive business executives. But a review of the osteocyte as “an endocrine cell and more” in Endocrine Reviews should imbue readers with a deeper respect for these essential guardians of our structural integrity (2013, doi:10.1210/er.2012-1026). “In addition to serving as endocrine cells and regulators of phosphate homeostasis, these cells control bone remodelling through regulation of both osteoclasts and osteoblasts, are mechanosensory cells that coordinate adaptive responses of the skeleton to mechanical loading, and also serve as a manager of the bone’s reservoir of calcium.”

Minerva often delves into journals that report exciting animal studies but never reports them, because if they all came true for humans, we would be cancer free, self repairing, ageless, and luminous in the dark—and there would be nothing left for medicine to do. But there can be good reasons why animal models might mislead. A paper in PLoS ONE concludes that “The implications of these findings for the utility of rodents as models in the area of emesis research are discussed” (2013;8:e60537, doi:10.1371/journal.pone.0060537). So what are these findings and how could they affect the use of rodents in emesis research? Well, the paper discusses at length the anatomical and physiological reasons that explain the biggest obstacle to using rodents for this purpose: they cannot vomit. Citeseer as: BMJ 2013;346:f3017