Lancelot Hogben was a remarkable person, born into poverty and with strong socialist, anti-racist and anti-eugenics sympathies, who made major contributions to zoology, social biology, genetics, statistics, linguistics and social medicine. He was a founding editor of the *British Journal of Social Medicine* in 1947, contributing papers on topics as diverse as ‘The Medical Ethnography of the Second World War’ and ‘Incompatibility of Mother and Foetus with respect to the Iso-Agglutinogen A and its Antibody’ during its first year of publication.

His classic description of the use of an N-of-1 study from 1953 is published in our ‘Reprints and Reflections’ section in this issue. The patient studied had previously undergone surgery for thyrotoxicosis and was now suffering from symptoms of tiredness and weakness that might have either a physical or psychological cause. The study design involved creating a ‘chaotic’ sequential administration of placebo, prostigmine and amphetamine over several 3-day cycles of treatment with careful patient self-reports of experience across 10 outcomes, including mood, appetite and physical activity. Hogben had thyroid surgery in 1943 and from the small clues he gives in the paper (e.g. ‘his previous retrosternal goitre had been labelled as functional until he himself persuaded a surgeon to explore the affected area’; ‘the subject (H)’, it is apparent that he was the patient in the study. James Tabery considers that this study stems from Hogben’s interests in statistical inference and causal mechanisms at the individual level—the ‘tyranny of averages’. Paul Glasziou notes that the earliest description of the N-of-1 design pre-dates Hogben and Sim’s by over 150 years, but their approach was methodologically sophisticated and aimed to remove multiple sources of bias. The clinical relevance of the N-of-1 design, mirroring careful clinical practice, is so obvious that it is surprising that it has not become more widely used as a means of finding suitable treatments for patients with chronic conditions. The findings of the study are not commented upon but Hogben certainly felt much better on amphetamines. I wonder if he continued to take them as so many people did (British Prime Minister Anthony Eden allegedly relied on them during the Suez Canal crisis of 1956); they could be bought over the counter in a chemist shop without a prescription at that time.

Alun Evans provides a diversion with a historical account of the French paradox of low levels of coronary heart disease despite high levels of fat intake first described in 1981. He traces the paradox to a comparison of the prevalence of angina between Ireland and France published in 1819. He notes that the clinicians of the time came up with a wide range of potential differences, or ‘fallacies’, between Ireland and France—a sedentary life, a better climate, animal food, vexation of the mind and, of course, wine consumption.

Type 2 diabetes trends appear to be moving inexorably upwards in most countries of the world. In this issue, Katikireddi et al. present findings from a systematic review of trends in prevalence of diabetes and pre-diabetes (i.e. impaired fasting glucose, impaired glucose tolerance) in South Asians. They find that whereas diabetes prevalence is increasing, pre-diabetes is becoming less prevalent, an apparent paradox, which they consider may be due to acceleration of pre-diabetes to frank diabetes or to early life determinants. Gujral et al., in a commentary on this article, concur with the idea of pre-diabetes to diabetes conversion becoming more rapid among South Asians as an explanation for the observed trends. A falling prevalence of pre-diabetes would arise if incidence is falling (unlikely in the face of secular trends in obesity and physical activity) or if the average duration of the condition is decreasing. A decrease in average duration can be explained without invoking early life determinants or an acceleration of the natural history of pre-diabetes. The duration of pre-diabetes will tend to shrink as a function of increased screening activity because of re-classification of individuals to normoglycaemia—a regression to the mean effect—which will reduce the pre-diabetes rate. However, when the totality of the available global evidence is examined and modelled, a different picture emerges.
Impaired plasma glucose has increased by 0.16 and 0.20 mmol/l per decade since 1980 in South Asian men and women, respectively, with global trends showing an increase of about half this amount. Diabetes prevalence has also increased in both South Asians and globally. So, perhaps there is no paradox to be explained.

Government civil servants work hard to deliver policies that are often unpopular and have been adversely affected by repeated re-organizations by successive governments. Is the strain affecting them? In this issue, Kivimaki and colleagues report on job strain and coronary heart disease in the Whitehall II study of London resident civil servants. If you are feeling a bit stressed yourself, answer the following questions: Are your job demands high? Do you have little decision latitude? Do you lack support in the workplace? Three ‘yes’ responses means you have job strain. During an average of 11 years’ follow-up, job strain was associated with a doubling of the hazard ratio for ‘hard’ coronary events. The thrust of this article was to examine whether adding job strain to conventional Framingham risk scoring improves the prediction of incident coronary events—it does not, probably because any effect of job strain operates through variables measured in the Framingham score. Disappointing findings if you want to promote ‘job strain’ as an everyday occupational health measure, but as Kivimaki and colleagues state, the same situation exists for other risk factors that are considered targets for prevention (e.g. obesity, physical activity) but do not improve risk prediction. They call for randomized trials to answer the question of whether interventions for job strain will reduce coronary heart disease risk. Encouraging results from stress reduction (a halving of new angina cases) were reported in the 1980s, but given the general lack of evidence that psychosocial factors cause physical disease these have not been pursued.

References