Lancelot Hogben on speed: the forgotten history of the n-of-1 trial

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N-of-1 trials, in which different treatment strategies are evaluated in a blinded fashion by a single patient to determine which strategy produces the greatest benefit, are increasingly being advocated by clinical epidemiologists. According to the conventional account they were introduced into the medical domain in the mid-1980s, having been previously used in psychology but not in medical practice. This ignores an extraordinary publication by Lancelot Hogben in the *British Journal of Preventive and Social Medicine* in 1953, "The self-controlled and self-recorded clinical trial for low-grade morbidity". Hogben—a leading geneticist, populariser of science, socialist, pregnancy test inventor, jailbird and anti-eugenicist, who became the first editor of the *British Journal of Social Medicine* in 1947 and since 1946 held the chair of Medical Statistics at the University of Birmingham, outlined the principles of the n-of-1 trial and proceeded to report a demonstration of its implementation. The patient (H; clearly Hogben himself) was suffering from increasing lassitude and weakness, with a differential diagnosis of myasthenia gravis or "functional symptoms". Three treatments were assigned in blocks of three days over a 78 day period: prostigmine (the current therapy for myasthenia), a lactose placebo, and d-amphetamine. Each day Hogben completed a detailed form he had designed for such single patient trials, which recorded details of work routine, activity level, mood, appetite, and physiology. A "liaison officer" (C) who was also blind to the treatment provided Hogben with the treatments and also recorded his responses. This was presumably Hogben's wife, the demographer, trade union organiser and researcher in social medicine, Enid Charles. After completion of the treatment period it was clear that prostigmine produced no particular benefits compared with placebo. D-amphetamine led to a marked improvement in mood and later retirement to bed—but no increase in working hours. Hogben discussed the advantages of the n-of-1 trial at length, in particular the ability to make clinical recommendations for individual patients rather than the abstract average patient. To Hogben accepting group data reflected a lowering of standards and "concealing our retreat from a position of hard-won advantage behind an impressive facade of irrelevant algebra". Hogben's paper produced little response, although an n-of-1 trial of hypnotic treatment among neurotics appeared in the *British Journal of Preventive and Social Medicine* in 1955. Hogben's advocacy of the n-of-1 trial will be contextualised through consideration of the personal, social, and historical background to his classic, but uncited, 1953 paper.