

# A modest proposal for research

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*On the occasion of his retirement from WHO this month, Desmond Avery, formerly Editor of World Health Forum and a former Bulletin editor, was invited to contribute this editorial.*

Complexity is conducive to dependence on specialists on the one hand, and mistrust of them on the other. If you read in the *Bulletin*, “A dendrogram of sequence-relatedness was constructed by the method of the VPI maximum-likelihood bootstrap consensus tree (PUZZLE, version 4.0)” (1), and this is not in your area of specialization, you might respect it for its apparent professionalism, resent it for its obscurity, or just tune it out.

The usefulness of such information must be judged in relation to what the researchers were trying to do. In this case they were trying to calculate the implications of three cases of paralysis caused by wild poliovirus which had occurred in Roma children in the eastern harbour city of Bourgas, in Bulgaria, 10 years after the last case had been reported. In the context of the polio eradication campaign, the objective of the study was valid and it came to a plausible conclusion, so the *Bulletin*'s editorial committee was inclined to trust the authors, together with the peer reviewers whose verdict was that the methods were OK.

Trust is indispensable but so is wariness, as Uwe Reinhardt & Tsung-mei Cheng pointed out in their review of *The world health report 2000* (2). They objected that “to see what was actually done, one must plough through the cryptic commentary that accompanies the tables in the Annex or dig up and read sundry sources cited in the references”. Having done that, they suspected that the measures were flawed and the findings invalid. More fundamentally they questioned the value of the attempt itself, which was to rank the national health systems of 191 countries in order

of their “performance”, putting those with a few thousand inhabitants on the same league table as countries with over a billion, and budgets ranging from hundreds of escudos to trillions of dollars, all on the basis of a set of haphazardly collected but meticulously quantified opinions.

The criticism carried weight because the reviewers themselves were members of what they called “the health systems research community” and therefore knowledgeable about what its members should be doing. But their status as insiders also limits their reliability, since people who live in the same village are liable to miss points that are obvious to outsiders. Expertise is often needed but you do not have to be a carpenter to see whether a wooden table has legs of unequal length.

Research that merits attention asks important questions and proposes significant answers. This can be seen from papers that become classics, such as James Lind's *Treatise of the scurvy* (3), Richard Doll's “preliminary report on smoking and carcinoma” (4), or Geoffrey Rose's argument for focusing on “the determinants of incidence rates rather than the determinants of individual cases” (5). Such papers are also characterized by a high degree of clarity.

Scientists and their critics have deplored “the erosion of public trust and engagement in science and research” (6). A solution would be for professional researchers to do more trustworthy work, of course, and subject it to the most exacting standards of clarity possible. But for this they need the constraints, support and stimulation of an actively critical public.

To provide that service, people in other professions need to cultivate the spirit and methods of research. Everyone pursues knowledge objectives and uses methods to obtain findings and come to conclusions (the four elements of a piece of research according to the *Bulletin* abstracts). If they helped

one another do this better they would avoid being in the position of health workers being stoned by angry villagers or villagers being antagonized by obnoxious aliens, as happened recently during the early stages of the Marburg outbreak in Angola. Science and goodwill alike are activated by constructive enquiry, disabled without it.

The active use by all of scientific method would counteract “the betrayal of trust” (7) and offer universal access to “the pleasure of finding things out” (8). This would also be a rewarding and promising way for WHO to work for “the happiness, harmonious relations and security of all peoples” (9). ■

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