Summary points

Research in traditional Chinese medicine has been dominated by the search for its biological basis, identifying active substances, and investigating mechanisms of action

Searching for active substances and mechanisms of action is meaningless if a treatment has no clinical efficacy

As traditional medicines are already in use, research should adopt an efficacy driven approach, and start by showing efficacy in humans through randomised controlled trials

Cultivating a culture around uncertainty and evaluation is needed more than resolving the methodological difficulties in conducting randomised controlled trials of traditional medicines

However, as the efficacy of individualised treatments is determined by two factors: the treatment itself and the competence of the treating doctor, trials of individualised treatments could have problems for the explanation and application of their results: the efficacy shown in a trial may not be reproducible in other doctors and the absence of efficacy could be explained as resulting from poor skills of the doctor rather than from the treatment. Cluster trials that randomise patients to practitioners of traditional Chinese medicine and conventional medicine and allow practitioners to treat in an individualised manner have the same problems.

Attitude towards evaluation

In social research, "One of the greatest methodological fallacies of the last century . . . is the belief that science is a particular set of techniques; it is, rather, a state of mind, or attitude, and the organisational conditions which allow that attitude to be expressed."¹⁹ Is this also true of research in traditional Chinese medicine? The attitude towards the need for evaluation, rather than methodological difficulties, has been the greatest hindrance in evaluating traditional Chinese medicine. For advocates, every treatment works, so evaluation is unnecessary. For sceptics, traditional Chinese medicine is quackery, so evaluation is pointless. The truth probably lies somewhere in between: some treatments may be efficacious, and some are probably not. This stark division between proponents and opponents shows the collective professional uncertainty about traditional Chinese medicine and represents a typical clinical equipoise that calls for a randomised controlled trial.^{20 21} Methodological difficulties can be resolved only when the need for evaluation is widely endorsed.

Many interventions in the current practice of conventional medicine are of doubtful value and have not been proved by scientific research, and are thus also candidates for the efficacy driven approach to research. Research on basic mechanisms that is crucial for future advancement should not be downplayed in the new approach—but clinical research should precede basic research for interventions already in use.

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Endpiece

Questions to members of the College of Physicians

Whether they take as much medicine and remedies as the like number of men of other societies?

Whether of 1000 patients to the best physicians, aged of any decad, there do not dye as many as out [of] the inhabitants of places where there dwell no physicians?

Whether of 100 sick of acute diseases who use Physicians, as many dye and [in] misery, as where no art is used, or only chance?

Sir William Petty (1623-87). Concerning the study of the art of medicine. In: Lansdowne M, ed. *The Petty papers*. Vol 2. London: Constable, 1927:168-180.

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