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Letter to the Editor

Homeopathy: Where is the bias?



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Dear Editor

Homeopathy is controversial, and it is regrettable that contributions to the debate are sometimes expressed in pejorative terms rather than in the spirit of scientific criticism and evaluation of experimental results. Chirumbolo's letter on Oscillococcinum® is an example [1]. The hypothesis that the effects of homeopathy are due to placebo response is not supported by most systematic reviews and meta-analyses of clinical trials [2–4]. The evidence is particularly strong for upper respiratory tract infections and allergies [5,6]. The only meta-analysis of homeopathy as a whole which suggested that homeopathy could be a placebo effect [7] was methodologically flawed: it was based on only 8 papers, whose negative results were mainly influenced by one single trial [8].

That substances in the extremely high dilutions used in homeopathy can have effects which differ from pure water control has also been demonstrated by rigorous laboratory studies, including one of which Chirumbolo himself was the first author [9]. The questions of the role of placebo in clinical trials and of the suitable research methods to prove or to "improve" homeopathy are too complex to be disentangled in a letter and have been analyzed elsewhere [4,6]. A recent large scale pharmacoepidemiological study conducted in France suggests that the integration of homeopathy into family practice reduces the prescribing of potentially harmful drugs, with similar outcomes, compared to conventional practice [10].

Chirumbolo is selective in his citation, referring to "A recent metaanalysis from the British Homeopathic Association, at Luton (UK)". This was in fact a Cochrane Review which indeed concluded that there is "insufficient good evidence to enable robust conclusions to be made about Oscillococcinum® in the prevention or treatment of influenza and influenza-like illness" but also that "Our findings do not rule out the possibility that Oscillococcinum® could have a clinically useful treatment effect" [2]. It reported some statistically significant positive and reproduced results favoring Oscillococcinum® over placebo.

Particularly disturbing are the implications of bias or conflict of interest. These allegations are regrettable and unfounded. Much research on drugs is funded by pharmaceutical companies, especially when public funds are lacking as is the case for homeopathy. In line with publication ethics, we always declare potential conflicts of interest and vigorously refute any implication of bias. Ironically, Chirumbolo has similar conflicts of interest: his in-vitro work showing positive effects with very high dilutions of histamine was funded by a pharmaceutical company [9] and in 2012 he published a book ("Acqua informata o informante?") through another homeopathic pharmaceutical company.

Finally the statement that "homeopathy is not pharmacology" is a self-citation of a letter. The views expressed are not evidence-based or in line with current opinion [4,6 and references therein]. Despite its apparent implausibility homeopathy has survived for more than two centuries and enjoys increasing public popularity. The difficult scientific questions it raises will only be resolved through patient and critical accumulation and comparison of data and their interpretation.

Conflict of interests

The Authors declare that they have no conflict of interest. The University of Verona has established a scientific collaboration (a not for profit agreement) with Laboratoires Boiron, from which P.B. does not receive any direct benefit.

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