The authors of 'Comparison of veterinary drugs and veterinary homeopathy: part 1 and 2', respond: We welcome the opportunity to emphasise our concerns regarding what we view as an unethical practice by responding to the points raised in the above letter.

As explained in our review, we believe that homeopathy requires the existence of a 'healing power' with multiple supernatural properties. According to scientific understanding, such a thing is extremely implausible, as homeopaths — including De Beukelaer and others — acknowledge. To counter this problem, the term 'plausibility bias' has been used in an attempt to make credulity appear a positive thing.[1] We argue that plausibility bias applies in the case of all similar claims including ghosts, clairvoyance, telekinesis, miracles and yetis. Given the consensus that homeopathy is implausible, we believe it imperative that this is explained to clients before treatment so that proper informed consent can be provided.

De Beukelaer and others' main criticism of our review is that plausibility bias prevented us from fairly evaluating the evidence regarding efficacy of homeopathy. We dispute this and argue that their examples do not support that claim.

In early meta-analyses of homeopathy, as trials were excluded on the basis of increasing threshold of trial quality, the strength of the positive findings for homeopathy declined, but not to zero. Hahn argued that this non-zero finding implied that homeopathy has efficacy.[2] We feel that as this argument is invalid as it falsely assumes that the best available trials excluded all non-specific effects and biases.

Later systematic reviews and meta-analyses by homeopaths[3,4,5] acknowledge the imperfections of the current available trials. A systematic review by Mathie and others concluded 'individualised homeopathy may have small, specific treatment effects... The low or unclear overall quality of the evidence prompts caution in interpreting the findings.'[6] Mathie and Clausen's systematic review concluded that the data 'preclude generalisable conclusions about efficacy of a particular homeopathic medicine or the impact of individualised homeopathic intervention in any given medical condition in animals.'[4] Their subsequent meta-analysis[5] found only 'very limited evidence that clinical intervention in animals using homeopathic medicines is distinguishable from corresponding intervention using placebos. The low number and quality of the trials hinders a more decisive conclusion.' Although phrased positively for homeopathy, these conclusions are all consistent with a lack of efficacy.

This point is illustrated by Camerlink and others' trial, purported to show that homeopathic *Escherichia coli* reduced diarrhoea in piglets.[6] Despite being the only trial showing a statistically significant result for veterinary homeopathy (corrected P=0.02; the statistics used in the paper were incorrect[9]) graded as 'reliable evidence',[4,5] it had major flaws.[7]

Regarding laboratory evidence for homeopathy, the systematic review by Witt and others in 2007 concluded: 'no positive result was stable enough to be reproduced by all investigators. A general adoption of successed controls, randomization and blinding would strengthen the evidence of future experiments'.[8] Our review's conclusion regarding laboratory evidence was almost identical.

We fully support the EU Commission One Health action plan against antimicrobial resistance.[9,10] Novel drugs and alternatives to antibiotics are much needed. However, those alternatives must be efficacious, and evidence is that homeopathic remedies are not. Doehring and Sundrum reviewed this area and concluded that, on farms, 'replacing or reducing antibiotics with homeopathy currently cannot be recommended' due to a lack of evidence of efficacy.[11]

Some forms of complementary and alternative medicine may be efficacious. However, best evidence is that homeopathy is not. In human cancer patients, alternative medicine use instead of conventional treatment is associated with substantially increased risk of death.[12, 13, 14] It is our view that the RCVS is failing in its duty as regulator of the veterinary profession and upholder of standards of animal welfare by not expressing resolute disapproval of veterinary surgeons' use of homeopathy, in place of conventional treatments, on animals that may be suffering.

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Notes